





PN WO9715662-A2.  
XX  
PD 01-MAY-1997.  
XX  
PF 25-OCT-1996; 96WO-US017480.  
XX  
PR 26-OCT-1995; 95US-0005974P.  
PR 11-JAN-1996; 96US-00584040.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
PA (CHIR ) CHIRON CORP.  
XX  
PI Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;  
XX  
DR WPI; 1997-259017/23.  
XX  
XX Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA  
PT stability - useful for treating e.g. tumour angiogenesis, psoriasis,  
PT rheumatoid arthritis, etc., in a human patient.  
XX  
PS Claim 4; Page 79; 218pp; English.  
XX  
CC The present invention describes nucleic acid molecules which modulate the  
CC synthesis, expression and/or stability of a mRNA encoding 1 or more  
CC receptors of vascular endothelial growth factor (VEGF). A patient  
CC (preferably human) having a condition associated with the level of the  
CC fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing  
CC receptor (KDR) and/or foetal liver kinase 1 (flt-1) (e.g. tumour  
CC angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be  
CC treated by administering the nucleic acid molecule or the expression  
CC vector to the patient. AAX67275 to AAX75752 represent specific examples  
CC of nucleic acid molecules from the present invention  
XX  
SQ Sequence 17 BP; 1 A; 3 C; 0 G; 0 T; 13 U; 0 Other;  
XX  
Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 11.8%; Pred. No. 3.2e+03;  
Matches 2; Conservative 13; Mismatches 2; Indels 0; Gaps 0;  
QY 2159 TTCTCTCTTTT 2175  
Db 1 UCUCUACUUUUUUUU 17  
RESULT 4371  
AAX69807/c  
ID AAX69807 standard; RNA; 17 BP.  
XX  
AC AAX69807;  
XX  
XX 28-JUL-1999 (first entry)  
DT  
XX  
DE Human flt1 VEGF receptor hammerhead ribozyme substrate #1102.  
XX  
KW Vascular endothelial growth factor receptor; VEGF receptor; flt-1;  
KW KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;  
KW tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;  
KW fms-like tyrosine kinase 1; kinase insert domain containing receptor;  
KW foetal liver kinase 1; ss.  
XX  
OS Homo sapiens.  
XX  
XX WO9715662-A2.  
PN  
XX  
PD 01-MAY-1997.  
XX  
XX 25-OCT-1996; 96WO-US017480.  
PF  
XX 26-OCT-1995; 95US-0005974P.  
PR  
PR 11-JAN-1996; 96US-00584040.  
XX  
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PA (CHIR ) CHIRON CORP.

XX Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;  
PI  
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CC receptor (KDR) and/or foetal liver kinase 1 (flt-1) (e.g. tumour  
CC angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be  
CC treated by administering the nucleic acid molecule or the expression  
CC vector to the patient. AAX67275 to AAX75752 represent specific examples  
CC of nucleic acid molecules from the present invention  
XX  
SQ Sequence 17 BP; 3 A; 3 C; 0 G; 0 T; 11 U; 0 Other;  
XX  
Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 2780 GAATTGAAAAA 2796  
Db 17 GATTGGAAAAA 1  
RESULT 4372  
AAX75069  
ID AAX75069 standard; RNA; 17 BP.  
XX  
XX AAX75069;  
AC  
XX 28-JUL-1999 (first entry)  
DT  
XX  
DE Mouse flt-1 VEGF receptor hammerhead ribozyme substrate #597.  
XX  
KW Vascular endothelial growth factor receptor; VEGF receptor; flt-1;  
KW KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;  
KW tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;  
KW fms-like tyrosine kinase 1; kinase insert domain containing receptor;  
KW foetal liver kinase 1; ss.  
XX  
OS Mus sp.  
XX  
XX WO9715662-A2.  
PN  
XX  
PD 01-MAY-1997.  
XX  
XX 25-OCT-1996; 96WO-US017480.  
PF  
XX 26-OCT-1995; 95US-0005974P.  
PR  
PR 11-JAN-1996; 96US-00584040.  
XX  
XX (RIBO-) RIBOZYME PHARM INC.  
PA  
PA (CHIR ) CHIRON CORP.  
XX  
PI Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;  
XX  
DR WPI; 1997-259017/23.  
XX  
XX Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA  
PT stability - useful for treating e.g. tumour angiogenesis, psoriasis,  
PT rheumatoid arthritis, etc., in a human patient.  
PT  
XX  
PS Claim 4; Page 173; 218pp; English.  
XX

CC The present invention describes nucleic acid molecules which modulate the  
CC synthesis, expression and/or stability of a mRNA encoding 1 or more  
CC receptors of vascular endothelial growth factor (VEGF). A patient  
CC (preferably human) having a condition associated with the level of the  
CC fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing  
CC receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour  
CC angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be  
CC treated by administering the nucleic acid molecule or the expression  
CC vector to the patient. AAX67275 to AAX75752 represent specific examples  
CC of nucleic acid molecules from the present invention  
XX

SQ Sequence 17 BP; 0 A; 0 C; 2 G; 0 T; 15 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 0.0%; Pred. No. 3.2e+03;  
Matches 0; Conservative 15; Mismatches 2; Indels 0; Gaps 0;

QY 2166 TTTT TTTT TTTT TTTT TTTT 2182  
Db 1 UUUU GUUU UUUU GUUU 17

RESULT 4373  
AAX75069/c  
ID AAX75069 standard; RNA; 17 BP.

XX AAX75069;  
XX  
XX 28-JUL-1999 (first entry)  
XX  
DE Mouse flt-1 VEGF receptor hammerhead ribozyme substrate #597.  
XX  
KW Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;  
KW KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;  
KW tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;  
KW fms-like tyrosine kinase 1; kinase insert domain containing receptor;  
KW foetal liver kinase 1; ss.

OS Mus sp.  
XX  
XX WO9715662-A2.  
XX  
XX 01-MAY-1997.  
XX  
XX 25-OCT-1996; 96WO-US017480.  
XX  
XX 26-OCT-1995; 95US-0005974P.  
PR 11-JAN-1996; 96US-00584040.

XX  
PA (RIBO-) RIBOZYME PHARM INC.  
PA (CHIR ) CHIRON CORP.  
XX  
XX Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;  
WPI; 1997-259017/23.

XX Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA  
PT stability - useful for treating e.g. tumour angiogenesis, psoriasis,  
PT rheumatoid arthritis, etc., in a human patient.  
XX  
PS Claim 4; Page 173; 218pp; English.

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CC receptors of vascular endothelial growth factor (VEGF). A patient  
CC (preferably human) having a condition associated with the level of the  
CC fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing  
CC receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour  
CC angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be  
CC treated by administering the nucleic acid molecule or the expression  
CC vector to the patient. AAX67275 to AAX75752 represent specific examples  
CC of nucleic acid molecules from the present invention  
XX

SQ Sequence 17 BP; 0 A; 0 C; 2 G; 0 T; 15 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2786 AAAAAA AAAAAA AAAAAA 2802  
Db 17 AAAACA AAAACA AAAACA 1

RESULT 4374  
AAX69806/c  
ID AAX69806 standard; RNA; 17 BP.

XX AAX69806;  
XX  
XX 28-JUL-1999 (first entry)  
XX  
DE Human flt1 VEGF receptor hammerhead ribozyme substrate #1101.  
XX

KW Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;  
KW KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;  
KW tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;  
KW fms-like tyrosine kinase 1; kinase insert domain containing receptor;  
KW foetal liver kinase 1; ss.

XX Homo sapiens.  
XX  
XX WO9715662-A2.  
XX  
XX 01-MAY-1997.

XX 25-OCT-1996; 96WO-US017480.  
XX  
XX 26-OCT-1995; 95US-0005974P.  
PR 11-JAN-1996; 96US-00584040.

XX  
PA (RIBO-) RIBOZYME PHARM INC.  
PA (CHIR ) CHIRON CORP.

XX Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;  
WPI; 1997-259017/23.

XX Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA  
PT stability - useful for treating e.g. tumour angiogenesis, psoriasis,  
PT rheumatoid arthritis, etc., in a human patient.

XX Claim 4; Page 80; 218pp; English.  
XX  
XX The present invention describes nucleic acid molecules which modulate the  
CC synthesis, expression and/or stability of a mRNA encoding 1 or more  
CC receptors of vascular endothelial growth factor (VEGF). A patient  
CC (preferably human) having a condition associated with the level of the  
CC fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing  
CC receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour  
CC angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be  
CC treated by administering the nucleic acid molecule or the expression  
CC vector to the patient. AAX67275 to AAX75752 represent specific examples  
CC of nucleic acid molecules from the present invention  
XX

SQ Sequence 17 BP; 3 A; 2 C; 0 G; 0 T; 12 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2781 AATTGAAA AAAAAA AAAAAA 2797  
Db 17 ATTTGGAA AAAAAA AAAAAA 1

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RESULT 4375
AAX73109
ID AAX73109 standard; RNA; 17 BP.
XX
AC AAX73109;
XX
DT 28-JUL-1999 (first entry)
XX
DE Mouse flk-1 VEGF receptor hammerhead ribozyme substrate #542.
XX
KW Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
KW KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
KW tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
KW fms-like tyrosine kinase 1; kinase insert domain containing receptor;
KW foetal liver kinase 1; ss.
XX
OS Mus sp.
XX
PN WO9715662-A2.
XX
PD 01-MAY-1997.
XX
PF 25-OCT-1996; 96WO-US017480.
XX
PR 26-OCT-1995; 95US-0005974P.
PR 11-JAN-1996; 96US-00584040.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (CHIR ) CHIRON CORP.
XX
PI Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;
XX
DR WPI; 1997-259017/23.
XX
PF Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
PR stability - useful for treating e.g. tumour angiogenesis, psoriasis,
PR rheumatoid arthritis, etc., in a human patient.
XX
PA Claim 4; Page 140; 218pp; English.
XX
CC The present invention describes nucleic acid molecules which modulate the
CC synthesis, expression and/or stability of a mRNA encoding 1 or more
CC receptors of vascular endothelial growth factor (VEGF). A patient
CC (preferably human) having a condition associated with the level of the
CC fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
CC receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
CC angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
CC treated by administering the nucleic acid molecule or the expression
CC vector to the patient. AAX67275 to AAX75752 represent specific examples
CC of nucleic acid molecules from the present invention
XX
SQ Sequence 17 BP; 4 A; 3 C; 5 G; 0 T; 5 U; 0 Other;
Query Match 0.5%; Score 13.8; DB 1; Length 17;
Best Local Similarity 64.7%; Pred. No. 3.2e+03;
Matches 11; Conservative 4; Mismatches 2; Indels 0; Gaps 0;
QY 2553 AGAGGATGCTGGGCTCT 2569
DB 1 AGAGGAUUCUGGACUCU 17
RESULT 4376
AAX71548
ID AAX71548 standard; RNA; 17 BP.
XX
AC AAX71548;
XX
DT 28-JUL-1999 (first entry)
XX
DE Human KDR VEGF receptor hammerhead ribozyme substrate #560.
XX
KW Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
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KW KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
KW tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
KW fms-like tyrosine kinase 1; kinase insert domain containing receptor;
KW foetal liver kinase 1; ss.
XX
OS Homo sapiens.
XX
PN WO9715662-A2.
XX
PD 01-MAY-1997.
XX
PF 25-OCT-1996; 96WO-US017480.
XX
PR 26-OCT-1995; 95US-0005974P.
PR 11-JAN-1996; 96US-00584040.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (CHIR ) CHIRON CORP.
XX
PI Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;
XX
DR WPI; 1997-259017/23.
XX
PF Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
PR stability - useful for treating e.g. tumour angiogenesis, psoriasis,
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XX
PS Claim 4; Page 114; 218pp; English.
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CC synthesis, expression and/or stability of a mRNA encoding 1 or more
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CC fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
CC receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
CC angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
CC treated by administering the nucleic acid molecule or the expression
CC vector to the patient. AAX67275 to AAX75752 represent specific examples
CC of nucleic acid molecules from the present invention
XX
SQ Sequence 17 BP; 5 A; 3 C; 5 G; 0 T; 4 U; 0 Other;
Query Match 0.5%; Score 13.8; DB 1; Length 17;
Best Local Similarity 70.6%; Pred. No. 3.2e+03;
Matches 12; Conservative 3; Mismatches 2; Indels 0; Gaps 0;
QY 2552 AAGAGGATGCTGGGCTC 2568
DB 1 AAGAGGAUUCUGGACUC 17
RESULT 4377
AAX73108
ID AAX73108 standard; RNA; 17 BP.
XX
AC AAX73108;
XX
DT 28-JUL-1999 (first entry)
XX
DE Mouse flk-1 VEGF receptor hammerhead ribozyme substrate #541.
XX
KW Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
KW KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
KW tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
KW fms-like tyrosine kinase 1; kinase insert domain containing receptor;
KW foetal liver kinase 1; ss.
XX
OS Mus sp.
XX
PN WO9715662-A2.
XX
PD 01-MAY-1997.
XX
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PF 25-OCT-1996; 96WO-US017480.  
XX  
PR 26-OCT-1995; 95US-0005974P.  
PR 11-JAN-1996; 96US-00584040.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
PA (CHIR ) CHIRON CORP.  
XX  
PI Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;  
XX  
DR WPI; 1997-259017/23.  
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PT stability - useful for treating e.g. tumour angiogenesis, psoriasis,  
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XX  
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CC receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour  
CC angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be  
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CC vector to the patient. AAX67275 to AAX75752 represent specific examples  
CC of nucleic acid molecules from the present invention  
XX  
SQ Sequence 17 BP; 5 A; 3 C; 5 G; 0 T; 4 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 70.6%; Pred. No. 3.2e+03;  
Matches 12; Conservative 3; Mismatches 2; Indels 0; Gaps 0;  
  
QY 2552 AAGAGGATGCTGGGCTC 2568  
Db 1 AAGAGGAUUCUGGACUC 17  
  
RESULT 4378  
AAX36644/c  
ID AAX36644 standard; DNA; 17 BP.  
XX  
AC AAX36644;  
XX  
DT 13-JUL-1999 (first entry)  
XX  
DE Antisense oligomer SEQ ID NO. 41.  
XX  
KW Antisense oligonucleotide; gene expression inhibitor; diagnosis;  
KW oligonucleotide-based therapy; ss.  
XX  
OS Synthetic.  
XX  
PN US5830653-A.  
XX  
PD 03-NOV-1998.  
XX  
PF 07-JUN-1995; 95US-00473481.  
XX  
PR 26-NOV-1991; 91US-00799824.  
PR 25-AUG-1992; 92US-00935444.  
PR 23-OCT-1992; 92US-00965941.  
PR 25-NOV-1992; 92US-00976103.  
XX  
PA (GILE-) GILEAD SCI INC.  
XX  
PI Froehler B, Gutierrez AJ, Jones RJ, Matteucci M, Pudlo J;  
PI Wagner R;  
XX  
DR WPI; 1998-609233/51.  
XX

PT Screening of anti-sense oligo:nucleotide(s) for ability to inhibit gene  
PT expression - comprises micro-injecting varying amounts of the anti-sense  
PT oligomer into a host cell and measuring expression of the target and  
PT control genes.  
XX  
PS Example 17; Col 51; 104pp; English.  
XX  
CC This sequence represents an antisense oligonucleotide used to test the  
CC method of the invention. The method of the invention is for evaluation of  
CC an antisense oligomer for its ability to inhibit gene expression, and  
CC comprises: microinjecting varying amounts of the antisense oligomer into  
CC a host cell along with a target vector for the expression of a gene  
CC containing a target sequence for the antisense oligomer and a control  
CC vector for the expression of a control gene that encodes a detectable  
CC protein and does not contain the target sequence; and measuring  
CC expression of the target gene and the control gene. Increasing inhibition  
CC of the target gene expression, but not of the control gene expression, as  
CC the amount of antisense oligomer increases indicates the ability of the  
CC antisense oligomer to inhibit gene expression. The method is used in  
CC oligonucleotide-based therapy and diagnosis. The oligomers have enhanced  
CC affinity for complementary target nucleic acid sequences and improved  
CC binding affinity for double-stranded and/or single-stranded target  
CC sequences  
XX  
SQ Sequence 17 BP; 12 A; 0 C; 5 G; 0 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 2156 TTTTTCCTCCTTTT 2172  
Db 17 TTTTTCCTCCTTTCTTT 1  
  
RESULT 4379  
AAX09151  
ID AAX09151 standard; DNA; 17 BP.  
XX  
AC AAX09151;  
XX  
DT 24-MAR-1999 (first entry)  
XX  
DE Human biallelic polymorphic marker upstream primer #31.  
XX  
KW Polymorphism; biallelic; human; forensic; paternity testing; disease;  
KW detection; phenotypic typing; characteristic; infection; hereditary;  
KW autoimmune disease; cancer; inflammation; drug; therapy; medicament;  
KW treatment; marker; primer; ss.  
XX  
OS Synthetic.  
OS Homo sapiens.  
XX  
PN WO9820165-A2.  
XX  
PD 14-MAY-1998.  
XX  
PF 05-NOV-1997; 97WO-US020313.  
XX  
PR 06-NOV-1996; 96US-0030455P.  
XX  
PA (WHED ) WHITEHEAD INST BIOMEDICAL RES.  
XX  
PI Lander ES, Wang D, Hudson T;  
XX  
DR WPI; 1998-286974/25.  
XX  
PT New isolated nucleic acid segments from the human genome - used for  
PT determining polymorphic forms for use in e.g. forensics, paternity  
PT testing or phenotypic typing for disease.  
XX  
PS Claim 15; Page 49; 310pp; English.  
XX



CC AAX09121-X10268 are allele-specific oligonucleotide primers used in the  
CC isolation of various biallelic polymorphic markers found in the human  
CC genome (represented in AAX10269-X12937). These primers can be used in a  
CC method for determining polymorphic forms in an individual for use in e.g.  
CC forensics, paternity testing or for phenotypic typing for diseases such  
CC as agammaglobulinemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular  
CC dystrophy, Wiskott-Aldrich syndrome, Fabry's disease, familial  
CC hypercholesterolemia, polycystic kidney disease, hereditary  
CC spherocytosis, von Willebrand's disease, tuberous sclerosis, hereditary  
CC haemorrhagic telangiectasia, familial colonic polyposis, Ehlers-Danlos  
CC syndrome, osteogenesis imperfecta, acute intermittent porphyria,  
CC autoimmune diseases, inflammation, cancer, diseases of the nervous  
CC system, infection by pathogenic microorganisms, and characteristics such  
CC as longevity, appearance (e.g. baldness, obesity), strength, speed,  
CC endurance, fertility, and susceptibility or receptivity to particular  
CC drugs or therapeutic treatments. The isolated polymorphic nucleic acid  
CC segments can also be used to produce medicaments for the treatment or  
CC prophylaxis of such diseases

SQ Sequence 17 BP; 5 A; 5 C; 7 G; 0 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 455 GGCAGCCAGCAGCAGGC 471  
Db 1 GGCAGCCAGCAGCAGCAGAC 17

RESULT 4380  
AAV97882  
ID AAV97882 standard; RNA; 17 BP.  
XX  
AC AAV97882;  
XX  
DT 17-MAR-1999 (first entry)  
XX  
DE Human EGF-R target sequence nucleotide position 4903.  
XX

KW Human; epidermal growth factor receptor; EGFR; EGF-R; target sequence;  
KW hammerhead ribozyme; hairpin ribozyme; inhibition; cell proliferation;  
KW cancer; genetic drift; detection; mutation; ss.

XX Homo sapiens.  
OS  
XX WO9833893-A2.  
XX  
PD 06-AUG-1998.  
XX  
PF 14-JAN-1998; 98WO-US000730.  
XX  
PR 31-JAN-1997; 97US-0036476P.  
PR 04-DEC-1997; 97US-00985162.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
PA (UYAS-) UNIV ASTON.  
XX  
PI Akhtar S, Fell P, Mcswiggen JA;  
XX  
DR WPI; 1998-437449/37.

XX Enzymatic nucleic acids - which cleave RNA derived from an epidermal  
PT growth factor receptor, useful for inhibiting cell proliferation and for  
PT treating cancers.

XX Claim 5; Page 81; 109pp; English.  
XX The present invention describes enzymatic nucleic acid molecules (NAMS)  
CC which specifically cleave RNA derived from an epidermal growth factor  
CC receptor (EGF-R) gene. AAV97221 to AAV98043 and AAV98979 to AAV99090  
CC represent specifically claimed target sequence from human EGF-R. AAV98044  
CC to AAV98866 and AAV98867 to V9878 represent hammerhead ribozymes and

CC hairpin ribozymes respectively for human EGF-R. The NAMS are useful for  
CC cleaving EGF-R RNA in the treatment of a condition associated with EGFR  
CC expression levels e.g. to inhibit cell proliferation in the prevention or  
CC treatment of cancers. The NAMS can also be used as diagnostic tools to  
CC examine genetic drift and mutations within diseased cells or to detect  
CC the presence of EGF-R RNA in a cell

XX  
SQ Sequence 17 BP; 2 A; 3 C; 2 G; 0 T; 10 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 29.4%; Pred. No. 3.2e+03;  
Matches 5; Conservative 10; Mismatches 2; Indels 0; Gaps 0;

QY 2153 GATTTTTCCTCCTTTT 2169  
Db 1 GAUAGUUUUCUCCUUUU 17

RESULT 4381  
AAV96447/c  
ID AAV96447 standard; RNA; 17 BP.  
XX  
AC AAV96447;  
XX  
DT 01-MAR-1999 (first entry)

XX Potato citrate synthase target sequence position 348.  
DE  
XX Solaradine; glucosyltransferase; potato; citrate synthase; target;  
KW hammerhead ribozyme; hairpin ribozyme; alkaloid biosynthesis;  
KW flower formation; cleavage; solanaceous plant; ss.

XX Solanum tuberosum.  
OS  
XX WO9832843-A2.  
XX  
PD 30-JUL-1998.  
XX  
PF 14-JAN-1998; 98WO-US000738.  
XX  
PR 28-JAN-1997; 97US-0036545P.  
PR 28-JAN-1997; 97US-0036599P.  
PR 24-NOV-1997; 97US-00979416.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
XX  
PI Zwick MG, Mcswiggen JA;  
XX  
DR WPI; 1998-427939/36.

XX New enzymatic nucleic acid(s) - useful for, e.g. reducing alkaloid  
PT biosynthesis or regulating flowering.  
PT  
PS Claim 53; Page 53; 79pp; English.

XX The present invention describes enzymatic nucleic acid molecules with RNA  
CC -cleaving activity (e.g. ribozymes) which are capable of modulating the  
CC expression of plant genes: (i) involved in biosynthesis of alkaloids; or  
CC (ii) involved in flower formation. AAV95982 to AAV96334, and AAV96335 to  
CC AAV96354 represent potato solanidine glucosyltransferase hammerhead and  
CC hairpin ribozymes, respectively. AAV95629 to AAV95981, and AAV96355 to  
CC AAV96734 represent potato solanidine glucosyltransferase target  
CC sequences. AAV96773 to AAV97170, and AAV97171 to AAV97195 represent  
CC potato citrate synthase hammerhead and hairpin ribozymes, respectively.  
CC AAV96735 to AAV96772, and AAV97196 to AAV97220 represent potato citrate  
CC synthase target sequences. Ribozymes of the present invention can be used  
CC to inhibit the synthesis of toxic alkaloids in solanaceous plants,  
CC particularly potato but also tomato, pepper, aubergine and ditura or to  
CC inhibit flowering in potato, lettuce, spinach, cabbage, brussel sprouts,  
CC arugula, kale, collards, chard, beet, turnip, sweet potato and turf  
CC grass. Also the ribozymes can be used for RNA manipulation in the same  
CC way that restriction endonucleases are for DNA, as well as to examine  
CC genetic drift and mutations in plants and to detect specific RNA. The

CC ribozymes can be targeted to specific genes or to consensus sequences  
CC within a family of related genes, and being catalytic need to be present  
CC at only very low concentrations  
XX  
SQ Sequence 17 BP; 4 A; 6 C; 2 G; 0 T; 5 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1929 TCAGTGTAAAGGTAATG 1945  
Db 17 TCAGGGTCAAGGTAATG 1  
RESULT 4382  
AAV08636  
ID AAV08636 standard; DNA; 17 BP.  
XX  
AC AAV08636;  
XX  
DT 15-FEB-1999 (first entry)  
XX  
DE Primer ANG/22RT for human ACE gene.  
XX  
KW PCR primer; human; ACE; angiotensin converting enzyme; angiotensinogen;  
KW cardiovascular status; AGT; AT1; type 1 angiotensin II receptor; stroke;  
KW polymorphic pattern; blood pressure; electrocardiographic profile;  
KW cardiac condition diagnosis; myocardial infarction; atherosclerosis;  
KW hypertension; cardiovascular disease; ss.  
XX  
OS Synthetic.  
OS Homo sapiens.  
XX  
PN WO9845477-A2.  
XX  
PD 15-OCT-1998.  
XX  
PF 01-APR-1998; 98WO-IB000475.  
XX  
PR 04-APR-1997; 97US-0042930P.  
XX  
PA (EURO-) EURONA MEDICAL AB.  
XX  
PI Norberg LT, Andersson MK, Lindstroem PHR;  
XX  
DR WPI; 1998-568361/48.  
XX  
PT Assessing cardiovascular status in humans by polymorphic analysis - of  
PT genes for angiotensin converting enzyme, angiotensinogen and angiotensin  
PT II receptor, used to diagnose predisposition to disease and to predict  
PT effect of therapy.  
XX  
PS Example 1; Page 30; 71pp; English.  
XX  
CC This sequence represents a PCR primer for the human ACE (angiotensin  
CC converting enzyme) gene, and can be used in the method of the invention.  
CC The method is for assessing cardiovascular status in humans by  
CC determining the sequence of at least one polymorphic site in the ACE  
CC (angiotensin converting enzyme), AGT (angiotensinogen) and/or AT1 (type 1  
CC angiotensin II receptor) genes, and comparing the polymorphic pattern  
CC with that in patients with predetermined markers of status. The method is  
CC used to assess blood pressure or electrocardiographic profile, to  
CC diagnose a cardiac condition such as (silent) myocardial infarction (MI),  
CC hypertension, atherosclerosis or stroke. They can also be used to predict  
CC response to treatments with ACE inhibitors, angiotensin II receptor  
CC antagonists, diuretics, alpha- or beta-adrenergic receptor antagonists,  
CC etc. It is also used to identify susceptibility to cardiovascular  
CC disease. Libraries of nucleic acids containing polymorphic positions in  
CC the 3 genes, and libraries of targets corresponding to the peptides from  
CC the genes are used to screen for cardiovascular agents. The nucleic acids  
CC contained in the library can be is used as source of probes  
XX

SQ Sequence 17 BP; 6 A; 5 C; 6 G; 0 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 483 GCCAGAGCCAGGAGGA 499  
Db 1 GCCAGAGCCAGCAGAGA 17  
RESULT 4383  
AAX23090/C  
ID AAX23090 standard; DNA; 17 BP.  
XX  
AC AAX23090;  
XX  
DT 11-JUN-1999 (first entry)  
XX  
DE Primer #13.  
XX  
KW Minimal residual disease; cancer; treatment; malignancy-specific;  
KW fluorogenic probe; quantitative detection; primer; ss.  
XX  
OS Synthetic.  
OS Homo sapiens.  
XX  
PN WO9914366-A2.  
XX  
PD 25-MAR-1999.  
XX  
PF 18-SEP-1998; 98WO-NL000542.  
XX  
PR 18-SEP-1997; 97EP-00202858.  
XX  
PA (UYRO-) UNIV ROTTERDAM ERASMUS.  
XX  
PI Van Dongen JJM, Pongers-Willems MJ;  
XX  
DR WPI; 1999-229551/19.  
XX  
PT Determining residual disease comprises using a fluorogenic probe specific  
PT to a malignancy-specific nucleic acid sequence.  
XX  
PS Disclosure; Page 15; 49pp; English.  
XX  
CC This invention describes a method for determining minimal residual  
CC disease during and after cancer treatment. The method involves amplifying  
CC nucleic acid molecules using at least one primer reactive with a common  
CC gene segment, and identifying malignancy-specific nucleic acid sequences  
CC by hybridizing with a fluorogenic probe specific to the malignancy-  
CC specific nucleic acid sequences. The method is not restricted to a set of  
CC patients as in immunological marker analysis, and the new technique  
CC allows quantitative detection of frequencies of malignant cells, unlike  
CC current PCR methods, which are also time-consuming, inaccurate and  
CC difficult to standardize. The new method takes 3 hours, compared to 5  
CC days for conventional techniques, and has equal sensitivity. This  
CC sequence represents a primer used in the method of the invention  
XX  
SQ Sequence 17 BP; 4 A; 2 C; 9 G; 2 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 328 TCAGCCGCCACCCTACT 344  
Db 17 TCAGCCTCCACCCTGCT 1  
RESULT 4384  
AAA18461  
ID AAA18461 standard; RNA; 17 BP.

XX AAA18461;  
AC  
XX  
DT 19-JUN-2000 (first entry)  
XX  
DE Human TIE-2 substrate sequence SEQ ID NO:1687.  
XX  
KW Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;  
KW integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;  
KW hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic;  
KW ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;  
KW dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis;  
KW age related macular degeneration; inflammation; neovascular glaucoma;  
KW myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;  
KW tuberosus sclerosis; pot-wine stain; Sturge Weber syndrome;  
KW Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO9950403-A2.  
XX  
PD 07-OCT-1999.  
XX  
XX 24-MAR-1999; 99WO-US006507.  
XX  
XX 27-MAR-1998; 98US-0079678P.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
XX  
PI Pavco PA, Roberts E, Jarvis T, Coeshott C, Mcswiggen JA;  
XX  
XX WPI; 1999-591315/50.  
XX  
PT Novel ribozymes for modulating the synthesis, expression and/or stability  
PT of an mRNA encoding an angiogenic factors.  
XX  
PS Claim 56; Page 96; 305pp; English.  
XX  
CC The present invention describes enzymatic nucleic acid molecules with RNA  
CC cleaving activity, which specifically cleave RNA encoded by an aryl  
CC hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3  
CC gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to  
CC AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT,  
CC and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their  
CC corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to  
CC AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086  
CC and AAA19155 to AAA19222 represent their corresponding target sequences;  
CC and AAA19156 to AAA19222 represent their corresponding target sequences;  
CC AAA121689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequence  
CC for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to  
CC AAA23422 represent their corresponding target sequences. The ribozymes of  
CC the invention are used for modulating the synthesis, expression and/or  
CC stability of an mRNA encoding angiogenic factor, especially ARNT,  
CC integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are  
CC especially used to treat cancer, diabetic retinopathy, age related  
CC macular degeneration (ARMD), inflammation, and arthritis, as well as  
CC neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,  
CC angiofibroma of tuberosus sclerosis, pot-wine stains, Sturge Weber  
CC syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,  
CC and other syndromes and diseases related to the levels of ARNT, Tie-2,  
CC integrin subunit alpha-6, or integrin subunit beta-3  
XX  
SQ Sequence 17 BP; 3 A; 2 C; 4 G; 0 T; 8 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 52.9%; Pred. No. 3.2e+03;  
Matches 9; Conservative 6; Mismatches 2; Indels 0; Gaps 0;  
  
Qy 1117 TGCCATGTCGTGAAG 1133  
Db 1 UGCUUAUUUCUGUGAAG 17

RESULT 4385  
AAA22593  
ID AAA22593 standard; RNA; 17 BP.  
XX  
AC AAA22593;  
XX  
DT 19-JUN-2000 (first entry)  
XX  
DE Integrin subunit beta 3 substrate sequence SEQ ID NO:5819.  
XX  
KW Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;  
KW integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;  
KW hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic;  
KW ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;  
KW dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis;  
KW age related macular degeneration; inflammation; neovascular glaucoma;  
KW myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;  
KW tuberosus sclerosis; pot-wine stain; Sturge Weber syndrome;  
KW Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO9950403-A2.  
XX  
PD 07-OCT-1999.  
XX  
XX 24-MAR-1999; 99WO-US006507.  
XX  
XX 27-MAR-1998; 98US-0079678P.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
XX  
PI Pavco PA, Roberts E, Jarvis T, Coeshott C, Mcswiggen JA;  
XX  
XX WPI; 1999-591315/50.  
XX  
PT Novel ribozymes for modulating the synthesis, expression and/or stability  
PT of an mRNA encoding an angiogenic factors.  
XX  
PS Claim 54; Page 230; 305pp; English.  
XX  
CC The present invention describes enzymatic nucleic acid molecules with RNA  
CC cleaving activity, which specifically cleave RNA encoded by an aryl  
CC hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3  
CC gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to  
CC AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT,  
CC and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their  
CC corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to  
CC AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086  
CC and AAA19155 to AAA19222 represent their corresponding target sequences;  
CC AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme  
CC sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and  
CC AAA21596 to AAA21688 represent their corresponding target sequences;  
CC AAA21689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequence  
CC for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to  
CC AAA23422 represent their corresponding target sequences. The ribozymes of  
CC the invention are used for modulating the synthesis, expression and/or  
CC stability of an mRNA encoding angiogenic factor, especially ARNT,  
CC integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are  
CC especially used to treat cancer, diabetic retinopathy, age related  
CC macular degeneration (ARMD), inflammation, and arthritis, as well as  
CC neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,  
CC angiofibroma of tuberosus sclerosis, pot-wine stains, Sturge Weber  
CC syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,  
CC and other syndromes and diseases related to the levels of ARNT, Tie-2,  
CC integrin subunit alpha-6, or integrin subunit beta-3  
XX  
SQ Sequence 17 BP; 0 A; 3 C; 0 G; 0 T; 14 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 11.8%; Pred. No. 3.2e+03;



Matches 2; Conservative 13; Mismatches 2; Indels 0; Gaps 0;

QY 2155 TTTTTCCTCCTTTT 2171  
: : : : :  
Db 1 UUUUUUUUUUUUU 17

RESULT 4386  
AAA20755/c  
ID AAA20755 standard; RNA; 17 BP.  
XX  
AC AAA20755;  
XX  
XX 19-JUN-2000 (first entry)  
XX  
DE Integrin alpha 6 subunit substrate sequence SEQ ID NO:3981.  
XX  
KW Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;  
KW integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;  
KW hammerhead ribozyme; angiogenic factor; cytosolic; antidiabetic;  
KW ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;  
KW dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis;  
KW age related macular degeneration; inflammation; neovascular glaucoma;  
KW myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;  
KW tuberos sclerosi; pot-wine stain; Sturge Weber syndrome;  
KW Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.  
XX  
OS Homo sapiens.  
XX  
XX WO9950403-A2.  
PN  
XX  
PD 07-OCT-1999.  
XX  
XX 24-MAR-1999; 99WO-US006507.  
PF  
XX  
XX 27-MAR-1998; 98US-0079678P.  
PR  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
XX  
XX Pavco PA, Roberts E, Jarvis T, Coeshott C, Mcswiggen JA;  
PI  
XX WPI; 1999-591315/50.  
DR  
XX  
XX Novel ribozymes for modulating the synthesis, expression and/or stability  
PT of an mRNA encoding an angiogenic factors.  
PT  
XX Claim 55; Page 165; 305pp; English.  
PS  
XX  
CC The present invention describes enzymatic nucleic acid molecules with RNA  
CC cleaving activity, which specifically cleave RNA encoded by an aryl  
CC hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3  
CC gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to  
CC AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT,  
CC and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their  
CC corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to  
CC AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086  
CC and AAA19155 to AAA19222 represent their corresponding target sequences;  
CC AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme  
CC sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and  
CC AAA21596 to AAA21688 represent their corresponding target sequences;  
CC AAA21689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequence  
CC for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to  
CC AAA23422 represent their corresponding target sequences. The ribozymes of  
CC the invention are used for modulating the synthesis, expression and/or  
CC stability of an mRNA encoding angiogenic factor, especially ARNT,  
CC integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are  
CC especially used to treat cancer, diabetic retinopathy, age related  
CC macular degeneration (ARMD), inflammation, and arthritis, as well as  
CC neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,  
CC angiofibroma of tuberos sclerosi, pot-wine stains, Sturge Weber  
CC syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,  
CC and other syndromes and diseases related to the levels of ARNT, Tie-2,  
CC integrin subunit alpha-6, or integrin subunit beta-3

XX  
SQ Sequence 17 BP; 2 A; 2 C; 3 G; 0 T; 10 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 879 CTAATACAAAGTGACA 895  
| | | | | | | | | |  
Db 17 CCAATAAAAGTGACA 1

RESULT 4387  
AAA19040  
ID AAA19040 standard; RNA; 17 BP.  
XX  
AC AAA19040;  
XX  
XX 19-JUN-2000 (first entry)  
XX  
DE Human TIE-2 substrate sequence SEQ ID NO:2266.  
XX  
KW Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;  
KW integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;  
KW hammerhead ribozyme; angiogenic factor; cytosolic; antidiabetic;  
KW ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;  
KW dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis;  
KW age related macular degeneration; inflammation; neovascular glaucoma;  
KW myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;  
KW tuberos sclerosi; pot-wine stain; Sturge Weber syndrome;  
KW Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.  
XX  
XX Homo sapiens.  
OS  
XX  
XX WO9950403-A2.  
PN  
XX  
PD 07-OCT-1999.  
XX  
XX 24-MAR-1999; 99WO-US006507.  
PF  
XX  
XX 27-MAR-1998; 98US-0079678P.  
PR  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
XX  
XX Pavco PA, Roberts E, Jarvis T, Coeshott C, Mcswiggen JA;  
PI  
XX WPI; 1999-591315/50.  
DR  
XX  
XX Novel ribozymes for modulating the synthesis, expression and/or stability  
PT of an mRNA encoding an angiogenic factors.  
PT  
XX Claim 56; Page 132; 305pp; English.  
PS  
XX  
CC The present invention describes enzymatic nucleic acid molecules with RNA  
CC cleaving activity, which specifically cleave RNA encoded by an aryl  
CC hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3  
CC gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to  
CC AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT,  
CC and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their  
CC corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to  
CC AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086  
CC and AAA19155 to AAA19222 represent their corresponding target sequences;  
CC AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme  
CC sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and  
CC AAA21596 to AAA21688 represent their corresponding target sequences;  
CC AAA21689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequence  
CC for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to  
CC AAA23422 represent their corresponding target sequences. The ribozymes of  
CC the invention are used for modulating the synthesis, expression and/or  
CC stability of an mRNA encoding angiogenic factor, especially ARNT,  
CC integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are  
CC especially used to treat cancer, diabetic retinopathy, age related  
CC macular degeneration (ARMD), inflammation, and arthritis, as well as



CC neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,  
CC angiofibroma of tuberosus sclerosis, pot-wine stains, Sturge Weber  
CC syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,  
CC and other syndromes and diseases related to the levels of ARNT, Tie-2,  
CC integrin subunit alpha-6, or integrin subunit beta-3  
XX  
SQ Sequence 17 BP; 7 A; 0 C; 2 G; 0 T; 8 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 41.2%; Pred. No. 3.2e+03;  
Matches 7; Conservative 8; Mismatches 2; Indels 0; Gaps 0;  
QY 2353 TTCTGTATTTTAAAGAAA 2369  
Db 1 UUGUAUUAUUUAAGAAA 17  
RESULT 4388  
AAA21137/C  
ID AAA21137 standard; RNA; 17 BP.  
XX  
AC AAA21137;  
XX  
DT 19-JUN-2000 (first entry)  
XX  
DE Integrin alpha 6 subunit substrate sequence SEQ ID NO:4363.  
XX  
KW Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;  
KW integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;  
KW hammerhead ribozyme; angiogenic factor; cytotstatic; antidiabetic;  
KW ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;  
KW dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis;  
KW age related macular degeneration; inflammation; neovascular glaucoma;  
KW myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;  
KW tuberosus sclerosis; pot-wine stain; Sturge Weber syndrome;  
KW Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.  
XX  
OS Homo sapiens.  
XX  
XX WO9950403-A2.  
PN  
XX  
PD 07-OCT-1999.  
XX  
PF 24-MAR-1999; 99WO-US006507.  
XX  
XX 27-MAR-1998; 98US-0079678P.  
PR  
XX (RIBO-) RIBOZYME PHARM INC.  
PA  
XX  
XX Pavco PA, Roberts E, Jarvis T, Coeshott C, Mcswiggen JA;  
PI  
XX WPI; 1999-591315/50.  
DR  
XX  
XX Novel ribozymes for modulating the synthesis, expression and/or stability  
PT of an mRNA encoding an angiogenic factors.  
XX  
XX Claim 55; Page 189; 305pp; English.  
XX  
XX The present invention describes enzymatic nucleic acid molecules with RNA  
CC cleaving activity, which specifically cleave RNA encoded by an aryl  
CC hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3  
CC gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to  
CC AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT,  
CC and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their  
CC corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to  
CC AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086  
CC AAA19155 to AAA19222 represent their corresponding target sequences;  
CC and AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme  
CC sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and  
CC AAA21596 to AAA21688 represent their corresponding target sequences;  
CC AAA21689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequence  
CC for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to  
CC AAA23422 represent their corresponding target sequences. The ribozymes of

CC the invention are used for modulating the synthesis, expression and/or  
CC stability of an mRNA encoding angiogenic factor, especially ARNT,  
CC integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are  
CC especially used to treat cancer, diabetic retinopathy, age related  
CC macular degeneration (ARMD), inflammation, and arthritis, as well as  
CC neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,  
CC angiofibroma of tuberosus sclerosis, pot-wine stains, Sturge Weber  
CC syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,  
CC and other syndromes and diseases related to the levels of ARNT, Tie-2,  
CC integrin subunit alpha-6, or integrin subunit beta-3  
XX  
SQ Sequence 17 BP; 5 A; 4 C; 3 G; 0 T; 5 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 2208 AAATGGGAGACTCTTTG 2224  
Db 17 AAACCTGGAGACTCTTTG 1  
RESULT 4389  
AAA22975/C  
ID AAA22975 standard; RNA; 17 BP.  
XX  
AC AAA22975;  
XX  
DT 19-JUN-2000 (first entry)  
XX  
DE Integrin subunit beta 3 substrate sequence SEQ ID NO:6201.  
XX  
KW Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;  
KW integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;  
KW hammerhead ribozyme; angiogenic factor; cytotstatic; antidiabetic;  
KW ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;  
KW dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis;  
KW age related macular degeneration; inflammation; neovascular glaucoma;  
KW myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;  
KW tuberosus sclerosis; pot-wine stain; Sturge Weber syndrome;  
KW Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.  
XX  
OS Homo sapiens.  
XX  
XX WO9950403-A2.  
PN  
XX  
PD 07-OCT-1999.  
XX  
PF 24-MAR-1999; 99WO-US006507.  
XX  
XX 27-MAR-1998; 98US-0079678P.  
PR  
XX (RIBO-) RIBOZYME PHARM INC.  
PA  
XX  
XX Pavco PA, Roberts E, Jarvis T, Coeshott C, Mcswiggen JA;  
PI  
XX WPI; 1999-591315/50.  
DR  
XX  
XX Novel ribozymes for modulating the synthesis, expression and/or stability  
PT of an mRNA encoding an angiogenic factors.  
XX  
XX Claim 54; Page 254; 305pp; English.  
XX  
XX The present invention describes enzymatic nucleic acid molecules with RNA  
CC cleaving activity, which specifically cleave RNA encoded by an aryl  
CC hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3  
CC gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to  
CC AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT,  
CC and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their  
CC corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to  
CC AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086  
CC and AAA19155 to AAA19222 represent their corresponding target sequences;  
CC and AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme



CC The present invention describes enzymatic nucleic acid molecules with RNA  
CC cleaving activity, which specifically cleave RNA encoded by an aryl  
CC hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3  
CC gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to  
CC AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT,  
CC and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their  
CC corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to  
CC AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086  
CC and AAA19155 to AAA19222 represent their corresponding target sequences;  
CC AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme  
CC sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and  
CC AAA21596 to AAA21688 represent their corresponding target sequences;  
CC AAA21689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequence  
CC for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to  
CC AAA23422 represent their corresponding target sequences. The ribozymes of  
CC the invention are used for modulating the synthesis, expression and/or  
CC stability of an mRNA encoding angiogenic factor, especially ARNT,  
CC integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are  
CC especially used to treat cancer, diabetic retinopathy, age related  
CC macular degeneration (ARMD), inflammation, and arthritis, as well as  
CC neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,  
CC angiofibroma of tuberous sclerosis, pot-wine stains, Sturge Weber  
CC syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,  
CC and other syndromes and diseases related to the levels of ARNT, Tie-2,  
CC integrin subunit alpha-6, or integrin subunit beta-3  
XX  
SQ Sequence 17 BP; 2 A; 4 C; 3 G; 0 T; 8 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 47.1%; Pred. No. 3.2e+03;  
Matches 8; Conservative 7; Mismatches 2; Indels 0; Gaps 0;

QY 1095 CTGTTTCATTGGCTAGG 1111  
|: :||:|:|:|:|:|  
Db 1 CUCUUCAUUUGGCUAUG 17

RESULT 4392  
AAA38264

ID AAA38264 standard; DNA; 17 BP.

AC AAA38264;

XX 21-AUG-2000 (first entry)

DT Human angiotensinogen (AGT) exon 2 PCR primer, SEQ ID NO:64.

XX Angiotensinogen gene; AGT; coding region; polymorphism;  
KW polymorphic marker; cardiovascular disease; myocardial infarction;  
KW unstable angina; hypertension; atherosclerosis; stroke; prognosis;  
KW drug screening; treatment outcome; human; PCR primer; ss.

XX Homo sapiens.

OS WO200022166-A2.

PN 20-APR-2000.

XX 13-OCT-1999; 99WO-IB001678.

XX 14-OCT-1998; 98US-0104286P.

PR 14-OCT-1998; 98US-0104302P.

XX (EURO-) EURONA MEDICAL AB.

XX Norberg LT, Andersson MK, Lindstrom PHR, Jonsson L;

PI WPI; 2000-318010/27.

XX Assessing cardiovascular status in humans involves comparing test  
PT polymorphic pattern comprising polymorphic positions within genes  
PT encoding specific proteins, with reference polymorphic pattern.

XX

PS Example 1; Page 51; 126pp; English.

XX The invention relates to a novel method of assessing the cardiovascular  
CC status in an individual and to newly identified polymorphisms in the  
CC genes encoding angiotensin-converting enzyme (ACE), angiotensin II  
CC receptor type 1 (AT1) and type 2 (AT2), angiotensinogen (AGT), renin,  
CC aldosterone synthase, endothelin receptor type A and beta-adrenergic  
CC receptors 1 and 2. The method comprises determining the sequence at one  
CC or more polymorphic positions from the individual with a reference polymorphic  
CC pattern obtained from a population of individuals exhibiting a  
CC predetermined cardiovascular disease status. The polymorphic markers are  
CC useful for determining the predisposition of an individual to  
CC cardiovascular disorders such as myocardial infarction, unstable angina,  
CC hypertension, atherosclerosis and stroke. They are also useful for  
CC predicting the likely cardiovascular status of a patient given a  
CC treatment regimen comprising administration of cardiovascular drugs  
CC (e.g., ACE inhibitors, beta-adrenergic receptor antagonists (beta-  
CC blockers) or calcium channel blockers). One or more polymorphic markers  
CC provides a basis for predicting the outcome of a treatment regimen.  
CC Fragments of the genes comprising a polymorphic site may be used as  
CC primers and probes for detecting genetic polymorphisms or in molecular  
CC library arrays for high throughput screening. The genes, and the proteins  
CC they encode are useful in the screening of potential cardiovascular  
CC drugs. Determination of an individual's polymorphic pattern reduces or  
CC eliminates trial and error in selecting a treatment for a particular  
CC individual cardiovascular patient. It also provides the ability to  
CC eliminate patients from clinical trials who are predicted to be non-  
CC responsive, or at a risk for an adverse response, to a particular  
CC treatment regimen. Adverse results in an early trial can be evaluated to  
CC identify polymorphic patterns so that the adverse results can be  
CC correlated with a sub-population of the test population, permitting  
CC exclusion of such sub-populations from the treatment group. Beneficial  
CC drugs can be approved for use in the appropriate population, thereby  
CC decreasing the number of patients required for a clinical trial, which in  
CC turn decreases the duration and cost of such trials. Sequences AAA38252-  
CC A38267 represent PCR primers used in an exemplification of the invention  
CC to amplify short fragments of the human angiotensinogen gene coding  
CC region (AAA38324-A38327) for sequence determination  
XX

SQ Sequence 17 BP; 6 A; 5 C; 6 G; 0 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 17;

Best Local Similarity 88.2%; Pred. No. 3.2e+03;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 483 GCCAGAGCCGAGGGA 499

|||||

Db 1 GCCAGAGCCGAGGGA 17

RESULT 4393

AAA25444

ID AAA25444 standard; DNA; 17 BP.

XX AAA25444;

XX 19-JUL-2000 (first entry)

DE Oestrogen receptor hammerhead ribozyme target sequence SEQ ID NO:1942.

XX Oestrogen receptor; c-raf; k-ras; bcl-2; ribozyme; cleavage;

KW hammerhead ribozyme; hairpin ribozyme; antisense oligonucleotide;

KW gene expression modification; cancer; phosphorothioate; endonuclease;

KW anticancer; breast cancer; endometrium cancer; ss.

XX Homo sapiens.

XX WO9954459-A2.

PN 28-OCT-1999.

XX 19-APR-1999; 99WO-US008547.

PF



XX 20-APR-1998; 98US-0082404P.  
PR 23-JUN-1998; 98US-00103636.  
XX  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
XX  
XX Thompson JD, Beigelman L, Mcswiggen JA, Karpeisky A, Bellon L;  
PI Reynolds M, Zwick M, Jarvis T, Woolf T, Haerberli P;  
PI Matulic-Adamic J;  
XX  
XX WPI; 2000-013248/01.  
DR  
XX New nucleic acids that interact, and optionally cleave, target sequences,  
PT used to treat cancer.  
XX  
XX Claim 77; Page 79; 148pp; English.  
PS  
XX The present invention describes nucleic acids (A) that interact stably  
CC with a target sequence and contain at least one phosphoro(di)thioate  
CC link, having endonuclease activity. (A), and more generally any catalytic  
CC nucleic acid (A') that modulates expression of the oestrogen receptor  
CC gene, are used to treat cancer (particularly of breast or endometrium),  
CC in vivo or by transforming cells ex vivo and implanting treated cells, or  
CC for other conditions associated with levels of oestrogen receptor.  
CC Because of the high selectivity for targeted RNA, (A) can also be used to  
CC correlate inhibition of gene expression with alterations in phenotype,  
CC particularly for identification of therapeutic targets, and as research  
CC reagents (for RNA, in the same way that restriction endonucleases are  
CC used with DNA). The combination of modifications in (A) improves  
CC resistance to nucleases, binding affinity and/or activity. AAA23503 to  
CC AAA24747 represent oestrogen receptor hammerhead ribozyme sequences, and  
CC AAA24748 to AAA25992 represent their corresponding target sequences.  
CC AAA25993 to AAA26105 represent oestrogen receptor hairpin ribozyme  
CC sequences, and AAA26107 to AAA26218 represent their corresponding target  
CC sequences. AAA26219 to AAA26271 represent other ribozyme sequences and  
CC antisense oligonucleotides used in the exemplification of the present  
CC invention  
XX  
SQ Sequence 17 BP; 2 A; 0 C; 1 G; 14 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 1764 ATTAAGCTTTTTTTTTT 1780  
Db 1 ATTAGTTTTTTTTTTTTT 17  
  
RESULT 4394  
AAA25445  
ID AAA25445 standard; DNA; 17 BP.  
XX  
XX AAA25445;  
AC  
XX  
DT 19-JUL-2000 (first entry)  
XX  
DE Oestrogen receptor hammerhead ribozyme target sequence SEQ ID NO:1943.  
XX  
KW Oestrogen receptor; c-raf; k-ras; bcl-2; ribozyme; cleavage;  
KW hammerhead ribozyme; hairpin ribozyme; antisense oligonucleotide;  
KW gene expression modification; cancer; phosphorothioate; endonuclease;  
KW anticancer; breast cancer; endometrium cancer; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO9954459-A2.  
XX  
PD 28-OCT-1999.  
XX  
XX 19-APR-1999; 99WO-US008547.  
PF  
XX 20-APR-1998; 98US-0082404P.  
PR

PR 23-JUN-1998; 98US-00103636.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
XX  
XX Thompson JD, Beigelman L, Mcswiggen JA, Karpeisky A, Bellon L;  
PI Reynolds M, Zwick M, Jarvis T, Woolf T, Haerberli P;  
PI Matulic-Adamic J;  
XX  
XX WPI; 2000-013248/01.  
DR  
XX New nucleic acids that interact, and optionally cleave, target sequences,  
PT used to treat cancer.  
XX  
XX Claim 77; Page 79; 148pp; English.  
PS  
XX The present invention describes nucleic acids (A) that interact stably  
CC with a target sequence and contain at least one phosphoro(di)thioate  
CC link, having endonuclease activity. (A), and more generally any catalytic  
CC nucleic acid (A') that modulates expression of the oestrogen receptor  
CC gene, are used to treat cancer (particularly of breast or endometrium),  
CC in vivo or by transforming cells ex vivo and implanting treated cells, or  
CC for other conditions associated with levels of oestrogen receptor.  
CC Because of the high selectivity for targeted RNA, (A) can also be used to  
CC correlate inhibition of gene expression with alterations in phenotype,  
CC particularly for identification of therapeutic targets, and as research  
CC reagents (for RNA, in the same way that restriction endonucleases are  
CC used with DNA). The combination of modifications in (A) improves  
CC resistance to nucleases, binding affinity and/or activity. AAA23503 to  
CC AAA24747 represent oestrogen receptor hammerhead ribozyme sequences, and  
CC AAA24748 to AAA25992 represent their corresponding target sequences.  
CC AAA25993 to AAA26105 represent oestrogen receptor hairpin ribozyme  
CC sequences, and AAA26107 to AAA26218 represent their corresponding target  
CC sequences. AAA26219 to AAA26271 represent other ribozyme sequences and  
CC antisense oligonucleotides used in the exemplification of the present  
CC invention  
XX  
SQ Sequence 17 BP; 1 A; 0 C; 1 G; 15 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 1765 TTAAGCTTTTTTTTTT 1781  
Db 1 TTAGTTTTTTTTTTTTT 17  
  
RESULT 4395  
AAA25445/C  
ID AAA25445 standard; DNA; 17 BP.  
XX  
XX AAA25445;  
AC  
XX  
DT 19-JUL-2000 (first entry)  
XX  
DE Oestrogen receptor hammerhead ribozyme target sequence SEQ ID NO:1943.  
XX  
KW Oestrogen receptor; c-raf; k-ras; bcl-2; ribozyme; cleavage;  
KW hammerhead ribozyme; hairpin ribozyme; antisense oligonucleotide;  
KW gene expression modification; cancer; phosphorothioate; endonuclease;  
KW anticancer; breast cancer; endometrium cancer; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO9954459-A2.  
XX  
PD 28-OCT-1999.  
XX  
XX 19-APR-1999; 99WO-US008547.  
PF  
XX 20-APR-1998; 98US-0082404P.  
PR 23-JUN-1998; 98US-00103636.  
XX



PA (RIBO-) RIBOZYME PHARM INC.  
XX  
PI Thompson JD, Beigelman L, Mcswiggen JA, Karpeisky A, Bellon L;  
PI Reynolds M, Zwick M, Jarvis T, Woolf T, Haerberli P;  
PI Matulic-Adamic J;  
XX  
DR WPI; 2000-013248/01.  
XX  
PT New nucleic acids that interact, and optionally cleave, target sequences,  
PT used to treat cancer.  
XX  
PS Claim 77; Page 79; 148pp; English.  
XX  
CC The present invention describes nucleic acids (A) that interact stably  
CC with a target sequence and contain at least one phosphoro(di)thioate  
CC link, having endonuclease activity. (A), and more generally any catalytic  
CC nucleic acid (A') that modulates expression of the oestrogen receptor  
CC gene, are used to treat cancer (particularly of breast or endometrium),  
CC in vivo or by transforming cells ex vivo and implanting treated cells, or  
CC for other conditions associated with levels of oestrogen receptor.  
CC Because of the high selectivity for targeted RNA, (A) can also be used to  
CC correlate inhibition of gene expression with alterations in phenotype,  
CC particularly for identification of therapeutic targets, and as research  
CC reagents (for RNA, in the same way that restriction endonucleases are  
CC used with DNA). The combination of modifications in (A) improves  
CC resistance to nucleases, binding affinity and/or activity. AAA23503 to  
CC AAA24747 represent oestrogen receptor hammerhead ribozyme sequences, and  
CC AAA24748 to AAA25992 represent their corresponding target sequences.  
CC AAA25993 to AAA26105 represent oestrogen receptor hairpin ribozyme  
CC sequences, and AAA26107 to AAA26218 represent their corresponding target  
CC sequences. AAA26219 to AAA26271 represent other ribozyme sequences and  
CC antisense oligonucleotides used in the exemplification of the present  
CC invention  
XX  
SQ Sequence 17 BP; 1 A; 0 C; 1 G; 15 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 2786 AAAAAAAAAAAAAAA 2802  
Db 17 AAAAAAAAAAACTAAA 1  
  
RESULT 4396  
AAA25455  
ID AAA25455 standard; DNA; 17 BP.  
XX  
AC AAA25455;  
XX  
DT 19-JUL-2000 (first entry)  
XX  
DE Oestrogen receptor hammerhead ribozyme target sequence SEQ ID NO:1953.  
XX  
KW Oestrogen receptor; c-raf; k-ras; bcl-2; ribozyme; cleavage;  
KW hammerhead ribozyme; hairpin ribozyme; antisense oligonucleotide;  
KW gene expression modification; cancer; phosphorothioate; endonuclease;  
KW anticancer; breast cancer; endometrium cancer; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO9954459-A2.  
XX  
PD 28-OCT-1999.  
XX  
PF 19-APR-1999; 99WO-US008547.  
XX  
PR 20-APR-1998; 98US-0082404P.  
PR 23-JUN-1998; 98US-00103636.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
XX

PI Thompson JD, Beigelman L, Mcswiggen JA, Karpeisky A, Bellon L;  
PI Reynolds M, Zwick M, Jarvis T, Woolf T, Haerberli P;  
PI Matulic-Adamic J;  
XX  
DR WPI; 2000-013248/01.  
XX  
PT New nucleic acids that interact, and optionally cleave, target sequences,  
PT used to treat cancer.  
XX  
PS Claim 77; Page 79; 148pp; English.  
XX  
CC The present invention describes nucleic acids (A) that interact stably  
CC with a target sequence and contain at least one phosphoro(di)thioate  
CC link, having endonuclease activity. (A), and more generally any catalytic  
CC nucleic acid (A') that modulates expression of the oestrogen receptor  
CC gene, are used to treat cancer (particularly of breast or endometrium),  
CC in vivo or by transforming cells ex vivo and implanting treated cells, or  
CC for other conditions associated with levels of oestrogen receptor.  
CC Because of the high selectivity for targeted RNA, (A) can also be used to  
CC correlate inhibition of gene expression with alterations in phenotype,  
CC particularly for identification of therapeutic targets, and as research  
CC reagents (for RNA, in the same way that restriction endonucleases are  
CC used with DNA). The combination of modifications in (A) improves  
CC resistance to nucleases, binding affinity and/or activity. AAA23503 to  
CC AAA24747 represent oestrogen receptor hammerhead ribozyme sequences, and  
CC AAA24748 to AAA25992 represent their corresponding target sequences.  
CC AAA25993 to AAA26105 represent oestrogen receptor hairpin ribozyme  
CC sequences, and AAA26107 to AAA26218 represent their corresponding target  
CC sequences. AAA26219 to AAA26271 represent other ribozyme sequences and  
CC antisense oligonucleotides used in the exemplification of the present  
CC invention  
XX  
SQ Sequence 17 BP; 2 A; 0 C; 1 G; 14 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 2171 TTTTTTTTTTTTTTTTA 2187  
Db 1 TTTTTTTTTTTGTATA 17  
  
RESULT 4397  
AAA25180  
ID AAA25180 standard; DNA; 17 BP.  
XX  
AC AAA25180;  
XX  
DT 19-JUL-2000 (first entry)  
XX  
DE Oestrogen receptor hammerhead ribozyme target sequence SEQ ID NO:1678.  
XX  
KW Oestrogen receptor; c-raf; k-ras; bcl-2; ribozyme; cleavage;  
KW hammerhead ribozyme; hairpin ribozyme; antisense oligonucleotide;  
KW gene expression modification; cancer; phosphorothioate; endonuclease;  
KW anticancer; breast cancer; endometrium cancer; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO9954459-A2.  
XX  
PD 28-OCT-1999.  
XX  
PF 19-APR-1999; 99WO-US008547.  
XX  
PR 20-APR-1998; 98US-0082404P.  
PR 23-JUN-1998; 98US-00103636.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
XX  
PI Thompson JD, Beigelman L, Mcswiggen JA, Karpeisky A, Bellon L;  
PI Reynolds M, Zwick M, Jarvis T, Woolf T, Haerberli P;

PI Matulic-Adamic J;  
XX  
DR WPI; 2000-013248/01.  
XX  
PT New nucleic acids that interact, and optionally cleave, target sequences,  
PT used to treat cancer.  
XX  
PS Claim 77; Page 71; 148pp; English.  
XX  
CC The present invention describes nucleic acids (A) that interact stably  
CC with a target sequence and contain at least one phosphoro(di)thioate  
CC link, having endonuclease activity. (A), and more generally any catalytic  
CC nucleic acid (A') that modulates expression of the oestrogen receptor  
CC gene, are used to treat cancer (particularly of breast or endometrium),  
CC in vivo or by transforming cells ex vivo and implanting treated cells, or  
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CC sequences, and AAA26107 to AAA26218 represent their corresponding target  
CC sequences. AAA26219 to AAA26271 represent other ribozyme sequences and  
CC antisense oligonucleotides used in the exemplification of the present  
CC invention  
XX  
SQ Sequence 17 BP; 1 A; 0 C; 1 G; 15 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 2166 TTTTGTGTTTTTTT 2182  
Db ||||| ||||| |||||  
1 TTTTGTGTTTTTTT 17  
  
RESULT 4398  
AAA25180/c  
ID AAA25180 standard; DNA; 17 BP.  
XX  
AC AAA25180;  
XX  
DT 19-JUL-2000 (first entry)  
XX  
DE Oestrogen receptor hammerhead ribozyme target sequence SEQ ID NO:1678.  
XX  
KW Oestrogen receptor; c-raf; k-ras; bcl-2; ribozyme; cleavage;  
KW hammerhead ribozyme; hairpin ribozyme; antisense oligonucleotide;  
KW gene expression modification; cancer; phosphorothioate; endonuclease;  
KW anticancer; breast cancer; endometrium cancer; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO9954459-A2.  
XX  
PD 28-OCT-1999.  
XX  
PF 19-APR-1999; 99WO-US008547.  
XX  
PR 20-APR-1998; 98US-0082404P.  
PR 23-JUN-1998; 98US-00103636.  
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PA (RIBO-) RIBOZYME PHARM INC.  
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PI Thompson JD, Beigelman L, Mcswiggen JA, Karpeisky A, Bellon L;  
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CC gene, are used to treat cancer (particularly of breast or endometrium),  
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CC AAA25993 to AAA26105 represent oestrogen receptor hairpin ribozyme  
CC sequences, and AAA26107 to AAA26218 represent their corresponding target  
CC sequences. AAA26219 to AAA26271 represent other ribozyme sequences and  
CC antisense oligonucleotides used in the exemplification of the present  
CC invention  
XX  
SQ Sequence 17 BP; 1 A; 0 C; 1 G; 15 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 2786 AAAAAAAAAAAAAA 2802  
Db ||||| ||||| |||||  
17 AAAAAATAAACAAAAA 1  
  
RESULT 4399  
AAA25446  
ID AAA25446 standard; DNA; 17 BP.  
XX  
AC AAA25446;  
XX  
DT 19-JUL-2000 (first entry)  
XX  
DE Oestrogen receptor hammerhead ribozyme target sequence SEQ ID NO:1944.  
XX  
KW Oestrogen receptor; c-raf; k-ras; bcl-2; ribozyme; cleavage;  
KW hammerhead ribozyme; hairpin ribozyme; antisense oligonucleotide;  
KW gene expression modification; cancer; phosphorothioate; endonuclease;  
KW anticancer; breast cancer; endometrium cancer; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO9954459-A2.  
XX  
PD 28-OCT-1999.  
XX  
PF 19-APR-1999; 99WO-US008547.  
XX  
PR 20-APR-1998; 98US-0082404P.  
PR 23-JUN-1998; 98US-00103636.  
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XX  
DR WPI; 2000-013248/01.  
XX

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XX Claim 77; Page 79; 148pp; English.

PS The present invention describes nucleic acids (A) that interact stably  
XX with a target sequence and contain at least one phosphoro(di)thioate  
CC link, having endonuclease activity. (A), and more generally any catalytic  
CC nucleic acid (A') that modulates expression of the oestrogen receptor  
CC gene, are used to treat cancer (particularly of breast or endometrium),  
CC in vivo or by transforming cells ex vivo and implanting treated cells, or  
CC for other conditions associated with levels of oestrogen receptor.  
CC Because of the high selectivity for targeted RNA, (A) can also be used to  
CC correlate inhibition of gene expression with alterations in phenotype,  
CC particularly for identification of therapeutic targets, and as research  
CC reagents (for RNA, in the same way that restriction endonucleases are  
CC used with DNA). The combination of modifications in (A) improves  
CC resistance to nucleases, binding affinity and/or activity. AAA23503 to  
CC AAA24747 represent oestrogen receptor hammerhead ribozyme sequences, and  
CC AAA24748 to AAA25992 represent their corresponding target sequences.  
CC AAA25993 to AAA26105 represent oestrogen receptor hairpin ribozyme  
CC sequences, and AAA26107 to AAA26218 represent their corresponding target  
CC sequences. AAA26219 to AAA26271 represent other ribozyme sequences and  
CC antisense oligonucleotides used in the exemplification of the present  
CC invention

XX Sequence 17 BP; 1 A; 0 C; 1 G; 15 T; 0 U; 0 Other;

SQL Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2166 TTTT TTTT TTTT TTTT TTTT TTTT 2182  
DB 1 TTAG TTTT TTTT TTTT TTTT TTTT 17

RESULT 4400  
AAA25446/C  
ID AAA25446 standard; DNA; 17 BP.  
AC AAA25446;  
XX 19-JUL-2000 (first entry)  
DT Oestrogen receptor hammerhead ribozyme target sequence SEQ ID NO:1944.  
DE Oestrogen receptor; c-raf; k-ras; bcl-2; ribozyme; cleavage;  
XX hammerhead ribozyme; hairpin ribozyme; antisense oligonucleotide;  
KW gene expression modification; cancer; phosphorothioate; endonuclease;  
KW anticancer; breast cancer; endometrium cancer; ss.  
XX Homo sapiens.  
OS WO9954459-A2.  
XX 28-OCT-1999.  
PD 19-APR-1999; 99WO-US008547.  
XX 20-APR-1998; 98US-0082404P.  
PR 23-JUN-1998; 98US-00103636.  
XX (RIBO-) RIBOZYME PHARM INC.  
PA Thompson JD, Beigelman L, Mcswiggen JA, Karpeisky A, Bellon L;  
XX Reynolds M, Zwick M, Jarvis T, Woolf T, Haeberli P;  
PI Matulic-Adamic J;  
XX WPI; 2000-013248/01.  
DR New nucleic acids that interact, and optionally cleave, target sequences,  
XX used to treat cancer.  
PT

XX Claim 77; Page 79; 148pp; English.

PS The present invention describes nucleic acids (A) that interact stably  
XX with a target sequence and contain at least one phosphoro(di)thioate  
CC link, having endonuclease activity. (A), and more generally any catalytic  
CC nucleic acid (A') that modulates expression of the oestrogen receptor  
CC gene, are used to treat cancer (particularly of breast or endometrium),  
CC in vivo or by transforming cells ex vivo and implanting treated cells, or  
CC for other conditions associated with levels of oestrogen receptor.  
CC Because of the high selectivity for targeted RNA, (A) can also be used to  
CC correlate inhibition of gene expression with alterations in phenotype,  
CC particularly for identification of therapeutic targets, and as research  
CC reagents (for RNA, in the same way that restriction endonucleases are  
CC used with DNA). The combination of modifications in (A) improves  
CC resistance to nucleases, binding affinity and/or activity. AAA23503 to  
CC AAA24747 represent oestrogen receptor hammerhead ribozyme sequences, and  
CC AAA24748 to AAA25992 represent their corresponding target sequences.  
CC AAA25993 to AAA26105 represent oestrogen receptor hairpin ribozyme  
CC sequences, and AAA26107 to AAA26218 represent their corresponding target  
CC sequences. AAA26219 to AAA26271 represent other ribozyme sequences and  
CC antisense oligonucleotides used in the exemplification of the present  
CC invention

XX Sequence 17 BP; 1 A; 0 C; 1 G; 15 T; 0 U; 0 Other;

SQL Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2786 AAAAAA AAAAAA AAAAAA AAAAAA 2802  
DB 17 AAAAAA AAAAAA AAAAAA AAAAAA 1

RESULT 4401  
AAC61264  
ID AAC61264 standard; DNA; 17 BP.  
XX AAC61264;  
AC 30-JAN-2001 (first entry)  
XX Human ACE, AGT and AT1 genes polymorphisms PCR primer SEQ ID NO: 64.  
DE Human; genetic polymorphism; disease diagnosis; treatment; cancer;  
XX card.ovascular system; nervous system; glaucoma; PCR primer; ss.  
OS Homo sapiens.  
XX WO2000056922-A2.  
PN 28-SEP-2000.  
XX 23-MAR-2000; 2000WO-GB001102.  
PF 23-MAR-1999; 99US-0126046P.  
XX 23-MAR-1999; 99WO-IB000497.  
PR 24-MAR-1999; 99US-0126243P.  
XX 23-DEC-1999; 99US-00471890.  
XX (GEMI-) GEMINI GENOMICS AB.  
PA Lindstrom PHR, Norberg LT, Jonsson L, Olaisson E, Sanders R;  
XX WPI; 2000-638268/61.  
XX Assessing disease status in individual by determining sequence(s) at one  
PT or more polymorphic positions within the human genes encoding the  
PT protein(s) involved in physiological pathway associated with treatment  
PT regime.  
XX Example 1; Page 58; 141pp; English.  
PS





XX WO200061729-A2.  
PN 19-OCT-2000.  
XX  
PD  
XX  
PF 11-APR-2000; 2000WO-US009721.  
XX  
PR 12-APR-1999; 99US-0129390P.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
XX  
PI Blatt L, Zwick M, Pavco P, Mcswiggen J;  
XX  
DR WPI; 2000-647423/62.  
XX  
XX Enzymatic and antisense nucleic acid inhibition of repressor genes,  
PT useful for producing e.g. granulocyte colony stimulating factor protein,  
PT interferon alpha and erythropoietin.  
XX  
PS Claim 42; Page 127; 164pp; English.  
XX  
CC The present invention relates to enzymatic and antisense nucleic acid  
CC molecules that act as inhibitors of the expression of repressor genes  
CC encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription  
CC factor gene, IRF-2 and/or the CAAT Displacement Protein (CDP).  
CC Inhibition of the repressors removes prevents inhibition (and  
CC consequently increases expression of) genes involved in the production of  
CC erythropoietin, granulocyte colony stimulating factor protein and  
CC interferon alpha  
XX  
SQ Sequence 17 BP; 6 A; 1 C; 2 G; 0 T; 8 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 1971 TTACCTTGAAAAAAGA 1987  
Db 17 TTACCTTGAATAAATA 1  
  
RESULT 4405  
AAF02388/c  
ID AAF02388 standard; DNA; 17 BP.  
XX  
AC AAF02388;  
XX  
DT 16-FEB-2001 (first entry)  
XX  
DE Hammerhead ribozyme substrate #683.  
XX  
KW Ribozyme; erythropoietin; granulocyte colony stimulating factor;  
KW interferon alpha; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO200061729-A2.  
XX  
PD 19-OCT-2000.  
XX  
PF 11-APR-2000; 2000WO-US009721.  
XX  
PR 12-APR-1999; 99US-0129390P.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
XX  
PI Blatt L, Zwick M, Pavco P, Mcswiggen J;  
XX  
DR WPI; 2000-647423/62.  
XX  
XX Enzymatic and antisense nucleic acid inhibition of repressor genes,  
PT useful for producing e.g. granulocyte colony stimulating factor protein,  
PT interferon alpha and erythropoietin.

XX Claim 37; Page 71; 164pp; English.  
PS  
XX  
CC The present invention relates to enzymatic and antisense nucleic acid  
CC molecules that act as inhibitors of the expression of repressor genes  
CC encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription  
CC factor gene, IRF-2 and/or the CAAT Displacement Protein (CDP).  
CC Inhibition of the repressors removes prevents inhibition (and  
CC consequently increases expression of) genes involved in the production of  
CC erythropoietin, granulocyte colony stimulating factor protein and  
CC interferon alpha  
XX  
SQ Sequence 17 BP; 14 A; 0 C; 2 G; 1 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 2165 CTTTTTTTTTTTTTTT 2181  
Db 17 CTTTTTTTATTTCTT 1  
  
RESULT 4406  
AAF05982/c  
ID AAF05982 standard; DNA; 17 BP.  
XX  
AC AAF05982;  
XX  
DT 16-FEB-2001 (first entry)  
XX  
DE Hammerhead ribozyme substrate #2779.  
XX  
KW Ribozyme; erythropoietin; granulocyte colony stimulating factor;  
KW interferon alpha; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO200061729-A2.  
XX  
PD 19-OCT-2000.  
XX  
PF 11-APR-2000; 2000WO-US009721.  
XX  
PR 12-APR-1999; 99US-0129390P.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
XX  
PI Blatt L, Zwick M, Pavco P, Mcswiggen J;  
XX  
DR WPI; 2000-647423/62.  
XX  
XX Enzymatic and antisense nucleic acid inhibition of repressor genes,  
PT useful for producing e.g. granulocyte colony stimulating factor protein,  
PT interferon alpha and erythropoietin.  
XX  
PS Claim 42; Page 120; 164pp; English.  
XX  
CC The present invention relates to enzymatic and antisense nucleic acid  
CC molecules that act as inhibitors of the expression of repressor genes  
CC encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription  
CC factor gene, IRF-2 and/or the CAAT Displacement Protein (CDP).  
CC Inhibition of the repressors removes prevents inhibition (and  
CC consequently increases expression of) genes involved in the production of  
CC erythropoietin, granulocyte colony stimulating factor protein and  
CC interferon alpha  
XX  
SQ Sequence 17 BP; 5 A; 6 C; 0 G; 0 T; 6 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 2680 GTGGGTGAATGGACAT 2696  
Db 17 GTGTGTGAATGGAAT 1

RESULT 4407  
ABK01191/c  
ID ABK01191 standard; RNA; 17 BP.  
XX  
AC ABK01191;  
XX  
DT 12-MAR-2002 (first entry)  
XX  
DE Human NOGO Inozyme #461.  
XX

KW Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;  
KW cerebroprotective; nootropic; neuroprotective; antiparkinsonian;  
KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;  
KW DNazyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia;  
KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;  
KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;  
KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;  
KW inflammatory arthropathy; central nervous system injury;  
KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;  
KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;  
KW Parkinson's disease; ataxia; Huntington's disease;  
KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.  
XX

OS Homo sapiens.  
OS Synthetic.  
XX  
PN WO200159103-A2.  
XX  
PD 16-AUG-2001.  
XX  
PF 09-FEB-2001; 2001WO-US004273.  
XX  
PR 11-FEB-2000; 2000US-0181797P.  
PR 28-FEB-2000; 2000US-0185516P.  
PR 06-MAR-2000; 2000US-0187128P.  
XX

PA (RIBO-) RIBOZYME PHARM INC.  
PA (BLAT/) BLATT L.  
PA (MCSW/) MCSWIGGEN J.  
PA (CHOW/) CHOWRIRA B M.  
XX

PI Blatt L, Mcswiggen J, Chowrira BM;  
XX  
DR WPI; 2001-607195/69.  
XX

PT Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense constructs, which down regulate expression of a CD20 gene or neurite growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and central nervous system injury.

PS Claim 88; Page 85; 200pp; English.  
XX

CC The invention relates to a nucleic acid molecule which down regulates expression of a CD20 gene and a nucleic acid molecule which down regulates expression of a neurite growth inhibitor gene (NOGO). The nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a DNazyme) an inozyme (an endolytic nucleic acid cleaving an RNA molecule possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) or an amberzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA with a YGY motif). The CD20-targeting nucleic acid is used to cleave RNA of CD20 in the presence of a divalent cation that is preferably Mg<sup>2+</sup>. Furthermore, it may be contacted with a cell to reduce CD20 activity of the cell and treat a patient having a condition associated with the level of CD20. The treatment may further comprise the use of one or more therapies. In particular, the CD20 targeting nucleic acid may be used to treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell

CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,  
CC immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-  
CC targeting nucleic acid is used to cleave RNA of the NOGO gene in the  
CC presence of a divalent cation that is preferably Mg<sup>2+</sup>. Furthermore, the  
CC nucleic acid may be contacted with a cell to reduce NOGO activity of the  
CC cell and treat a patient having a condition associated with the level of  
CC NOGO. The treatment may further comprise the use of one or more  
CC therapies. In particular, the NOGO-targeting nucleic acid may be used to  
CC treat central nervous system (CNS) injury and cerebrovascular accident  
CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),  
CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),  
CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob  
CC disease, muscular dystrophy, and/or other neurodegenerative disease  
CC states which respond to the modulation of NOGO expression. The present  
CC sequence is an inozyme of the invention  
XX

SQ Sequence 17 BP; 6 A; 5 C; 2 G; 0 T; 4 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 2479 CTTTAAATGGTGATGGG 2495  
Db 17 CTTCTAATGGTGATGAG 1

RESULT 4408  
ABK00928/c  
ID ABK00928 standard; RNA; 17 BP.  
XX  
AC ABK00928;

DT 12-MAR-2002 (first entry)  
XX  
DE Human NOGO Inozyme #198.

KW Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;  
KW cerebroprotective; nootropic; neuroprotective; antiparkinsonian;  
KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;  
KW DNazyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia;  
KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;  
KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;  
KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;  
KW inflammatory arthropathy; central nervous system injury;  
KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;  
KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;  
KW Parkinson's disease; ataxia; Huntington's disease;  
KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.  
XX

OS Homo sapiens.  
OS Synthetic.

PN WO200159103-A2.

PD 16-AUG-2001.

XX 09-FEB-2001; 2001WO-US004273.

PR 11-FEB-2000; 2000US-0181797P.

PR 28-FEB-2000; 2000US-0185516P.

PR 06-MAR-2000; 2000US-0187128P.

XX (RIBO-) RIBOZYME PHARM INC.

PA (BLAT/) BLATT L.

PA (MCSW/) MCSWIGGEN J.

PA (CHOW/) CHOWRIRA B M.

XX Blatt L, Mcswiggen J, Chowrira BM;

XX WPI; 2001-607195/69.

PT Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense

PT constructs, which down regulate expression of a CD20 gene or neurite  
PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and  
PT central nervous system injury.  
XX  
PS Claim 88; Page 81; 200pp; English.  
XX  
CC The invention relates to a nucleic acid molecule which down regulates  
CC expression of a CD20 gene and a nucleic acid molecule which down  
CC regulates expression of a neurite growth inhibitor gene (NOGO). The  
CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a  
CC DNazyme) an Inozyme (an endolytic nucleic acid cleaving an RNA molecule  
CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) or  
CC an amberzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA  
CC with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA  
CC of CD20 in the presence of a divalent cation that is preferably Mg<sup>2+</sup>.  
CC Furthermore, it may be contacted with a cell to reduce CD20 activity of  
CC the cell and treat a patient having a condition associated with the level  
CC of CD20. The treatment may further comprise the use of one or more  
CC therapies. In particular, the CD20 targetting nucleic acid may be used to  
CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-  
CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic  
CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell  
CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,  
CC immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-  
CC targetting nucleic acid is used to cleave RNA of the NOGO gene in the  
CC presence of a divalent cation that is preferably Mg<sup>2+</sup>. Furthermore, the  
CC nucleic acid may be contacted with a cell to reduce NOGO activity of the  
CC cell and treat a patient having a condition associated with the level of  
CC NOGO. The treatment may further comprise the use of one or more  
CC therapies. In particular, the NOGO-targetting nucleic acid may be used to  
CC treat central nervous system (CNS) injury and cerebrovascular accident  
CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),  
CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),  
CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob  
CC disease, muscular dystrophy, and/or other neurodegenerative disease  
CC states which respond to the modulation of NOGO expression. The present  
CC sequence is an inozyme of the invention  
XX  
SQ Sequence 17 BP; 1 A; 12 C; 3 G; 0 T; 1 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 558 TGGAGGCGGGCGCGTG 574  
||||| ||||| |||||  
Db 17 TCGAGGGGGCGCGGCG 1  
RESULT 4409  
ABK00932/c  
ID ABK00932 standard; RNA; 17 BP.  
XX  
AC ABK00932;  
XX  
DT 12-MAR-2002 (first entry)  
XX  
DE Human NOGO Inozyme #202.  
XX  
KW Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;  
KW cerebroprotective; nootropic; neuroprotective; antiparkinsonian;  
KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;  
KW DNazyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia;  
KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;  
KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;  
KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;  
KW inflammatory arthropathy; central nervous system injury;  
KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;  
KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;  
KW Parkinson's disease; ataxia; Huntington's disease;  
KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.  
XX  
OS Homo sapiens.

OS Synthetic.  
XX WO200159103-A2.  
PN  
XX 16-AUG-2001.  
PD  
XX  
PF 09-FEB-2001; 2001WO-US004273.  
XX  
PR 11-FEB-2000; 2000US-0181797P.  
PR 28-FEB-2000; 2000US-0185516P.  
PR 06-MAR-2000; 2000US-0187128P.  
XX  
PA (RIBC-) RIBOZYME PHARM INC.  
PA (BLAT/) BLATT L.  
PA (MCSW/) MCSWIGGEN J.  
PA (CHOW/) CHOWRIRA B M.  
PI Blatt L, Mcswiggen J, Chowrira BM;  
XX WPI; 2001-607195/69.  
DR  
XX Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense  
PT constructs, which down regulate expression of a CD20 gene or neurite  
PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and  
PT central nervous system injury.  
PT Claim 88; Page 81; 200pp; English.  
XX  
CC The invention relates to a nucleic acid molecule which down regulates  
CC expression of a CD20 gene and a nucleic acid molecule which down  
CC regulates expression of a neurite growth inhibitor gene (NOGO). The  
CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a  
CC DNazyme) an Inozyme (an endolytic nucleic acid cleaving an RNA molecule  
CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) or  
CC an amberzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA  
CC with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA  
CC of CD20 in the presence of a divalent cation that is preferably Mg<sup>2+</sup>.  
CC Furthermore, it may be contacted with a cell to reduce CD20 activity of  
CC the cell and treat a patient having a condition associated with the level  
CC of CD20. The treatment may further comprise the use of one or more  
CC therapies. In particular, the CD20 targetting nucleic acid may be used to  
CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-  
CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic  
CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell  
CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,  
CC immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-  
CC targetting nucleic acid is used to cleave RNA of the NOGO gene in the  
CC presence of a divalent cation that is preferably Mg<sup>2+</sup>. Furthermore, the  
CC nucleic acid may be contacted with a cell to reduce NOGO activity of the  
CC cell and treat a patient having a condition associated with the level of  
CC NOGO. The treatment may further comprise the use of one or more  
CC therapies. In particular, the CD20 targetting nucleic acid may be used to  
CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-  
CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic  
CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell  
CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,  
CC immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-  
CC targetting nucleic acid is used to cleave RNA of the NOGO gene in the  
CC presence of a divalent cation that is preferably Mg<sup>2+</sup>. Furthermore, the  
CC nucleic acid may be contacted with a cell to reduce NOGO activity of the  
CC cell and treat a patient having a condition associated with the level of  
CC NOGO. The treatment may further comprise the use of one or more  
CC therapies. In particular, the CD20 targetting nucleic acid may be used to  
CC treat central nervous system (CNS) injury and cerebrovascular accident  
CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),  
CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),  
CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob  
CC disease, muscular dystrophy, and/or other neurodegenerative disease  
CC states which respond to the modulation of NOGO expression. The present  
CC sequence is an inozyme of the invention  
XX  
SQ Sequence 17 BP; 1 A; 13 C; 2 G; 0 T; 1 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 554 GGGCTGGAGGCGGGCGC 570  
||| ||||| |||||  
Db 17 GGGGTGGAGGGGGGCGC 1  
RESULT 4410  
ABK00933/c







XX Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;  
KW cerebroprotective; nootropic; neuroprotective; antiparkinsonian;  
KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;  
KW DNazyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia;  
KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;  
KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;  
KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;  
KW inflammatory arthropathy; central nervous system injury;  
KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;  
KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;  
KW Parkinson's disease; ataxia; Huntington's disease;  
KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.  
XX  
OS Homo sapiens.  
OS Synthetic.  
XX  
PN WO200159103-A2.  
XX  
PD 16-AUG-2001.  
XX  
PF 09-FEB-2001; 2001WO-US004273.  
XX  
PR 11-FEB-2000; 2000US-0181797P.  
PR 28-FEB-2000; 2000US-0185516P.  
PR 06-MAR-2000; 2000US-0187128P.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
PA (BLAT/) BLATT L.  
PA (MCSW/) MCSWIGGEN J.  
PA (CHOW/) CHOWRIRA B M.  
XX  
PI Blatt L, Mcswiggen J, Chowrira BM;  
XX WPI; 2001-607195/69.  
XX  
PT Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense  
PT constructs, which down regulate expression of a CD20 gene or neurite  
PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and  
PT central nervous system injury.  
XX  
PS Claim 88; Page 114; 200pp; English.  
XX

CC The invention relates to a nucleic acid molecule which down regulates  
CC expression of a CD20 gene and a nucleic acid molecule which down  
CC regulates expression of a neurite growth inhibitor gene (NOGO). The  
CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a  
CC DNazyme) an Inozyme (an endolytic nucleic acid cleaving an RNA molecule  
CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) or  
CC an amberzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA  
CC with a YGY motif). The CD20-targeting nucleic acid is used to cleave RNA  
CC of CD20 in the presence of a divalent cation that is preferably Mg<sup>2+</sup>.  
CC Furthermore, it may be contacted with a cell to reduce CD20 activity of  
CC the cell and treat a patient having a condition associated with the level  
CC of CD20. The treatment may further comprise the use of one or more  
CC therapies. In particular, the CD20 targeting nucleic acid may be used to  
CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-  
CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic  
CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell  
CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,  
CC immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-  
CC targeting nucleic acid is used to cleave RNA of the NOGO gene in the  
CC presence of a divalent cation that is preferably Mg<sup>2+</sup>. Furthermore, the  
CC nucleic acid may be contacted with a cell to reduce NOGO activity of the  
CC cell and treat a patient having a condition associated with the level of  
CC NOGO. The treatment may further comprise the use of one or more  
CC therapies. In particular, the NOGO-targeting nucleic acid may be used to  
CC treat central nervous system (CNS) injury and cerebrovascular accident  
CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),  
CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),  
CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob  
CC disease, muscular dystrophy, and/or other neurodegenerative disease  
CC states which respond to the modulation of NOGO expression. The present

CC sequence is a DNazyme molecule of the invention  
XX  
SQ Sequence 17 BP; 14 A; 0 C; 2 G; 0 T; 1 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 2160 TTCTCCTTTT TTTT TTTT 2176  
Db 17 TTCTTCTATTTT TTTT 1  
RESULT 4414  
ABK03238/c  
ID ABK03238 standard; RNA; 17 BP.  
XX  
AC ABK03238;  
DT 12-MAR-2002 (first entry)  
XX  
DE Human CD20 Inozyme #189.  
XX  
KW Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;  
KW cerebroprotective; nootropic; neuroprotective; antiparkinsonian;  
KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;  
KW DNazyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia;  
KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;  
KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;  
KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;  
KW inflammatory arthropathy; central nervous system injury;  
KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;  
KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;  
KW Parkinson's disease; ataxia; Huntington's disease;  
KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.  
XX  
OS Homo sapiens.  
OS Synthetic.  
XX  
PN WO200159103-A2.  
XX  
PD 16-AUG-2001.  
XX  
PF 09-FEB-2001; 2001WO-US004273.  
XX  
PR 11-FEB-2000; 2000US-0181797P.  
PR 28-FEB-2000; 2000US-0185516P.  
PR 06-MAR-2000; 2000US-0187128P.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
PA (BLAT/) BLATT L.  
PA (MCSW/) MCSWIGGEN J.  
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XX  
PI Blatt L, Mcswiggen J, Chowrira BM;  
XX WPI; 2001-607195/69.  
XX  
PT Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense  
PT constructs, which down regulate expression of a CD20 gene or neurite  
PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and  
PT central nervous system injury.  
XX  
PS Claim 30; Page 149; 200pp; English.  
XX  
CC The invention relates to a nucleic acid molecule which down regulates  
CC expression of a CD20 gene and a nucleic acid molecule which down  
CC regulates expression of a neurite growth inhibitor gene (NOGO). The  
CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a  
CC DNazyme) an Inozyme (an endolytic nucleic acid cleaving an RNA molecule  
CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) or  
CC an amberzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA  
CC with a YGY motif). The CD20-targeting nucleic acid is used to cleave RNA



CC of CD20 in the presence of a divalent cation that is preferably Mg<sup>2+</sup>.  
CC Furthermore, it may be contacted with a cell to reduce CD20 activity of  
CC the cell and treat a patient having a condition associated with the level  
CC of CD20. The treatment may further comprise the use of one or more  
CC therapies. In particular, the CD20 targeting nucleic acid may be used to  
CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular NHL, lymphocytic  
CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic  
CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell  
CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,  
CC immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-  
CC targeting nucleic acid is used to cleave RNA of the NOGO gene in the  
CC presence of a divalent cation that is preferably Mg<sup>2+</sup>. Furthermore, the  
CC nucleic acid may be contacted with a cell to reduce NOGO activity of the  
CC cell and treat a patient having a condition associated with the level of  
CC NOGO. The treatment may further comprise the use of one or more  
CC therapies. In particular, the NOGO-targeting nucleic acid may be used to  
CC treat central nervous system (CNS) injury and cerebrovascular accident  
CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),  
CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),  
CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob  
CC disease, muscular dystrophy, and/or other neurodegenerative disease  
CC states which respond to the modulation of NOGO expression. The present  
CC sequence is an inozyme of the invention  
XX  
SQ Sequence 17 BP; 7 A; 4 C; 3 G; 0 T; 3 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2568 CTGTTCTTGGCTTGGAA 2584  
Db 17 CTCTTCTTGGATTGAA 1

RESULT 4415  
ABK00931/C  
ID ABK00931 standard; RNA; 17 BP.  
XX  
AC ABK00931;  
XX 12-MAR-2002 (first entry)  
XX Human NOGO Inozyme #201.  
XX  
KW Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;  
KW cerebroprotective; nootropic; neuroprotective; antiparkinsonian;  
KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;  
KW DNazyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia;  
KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;  
KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;  
KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;  
KW inflammatory arthropathy; central nervous system injury;  
KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;  
KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;  
KW Parkinson's disease; ataxia; Huntington's disease;  
KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.

OS Homo sapiens.  
OS Synthetic.  
XX  
PN WO200159103-A2.  
XX  
PD 16-AUG-2001.  
XX  
PF 09-FEB-2001; 2001WO-US004273.  
XX  
PR 11-FEB-2000; 2000US-0181797P.  
PR 28-FEB-2000; 2000US-0185516P.  
PR 06-MAR-2000; 2000US-0187128P.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
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PA (MCSW/) MCSWIGGEN J.  
PA (CHOW/) CHOWRIRA B M.  
XX  
PI Blatt L, Mcswiggen J, Chowrira BM;  
XX  
DR WPI; 2001-607195/69.  
XX  
PT Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense  
PT constructs, which down regulate expression of a CD20 gene or neurite  
PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and  
PT central nervous system injury.  
XX  
PS Claim 88; Page 81; 200pp; English.  
XX  
CC The invention relates to a nucleic acid molecule which down regulates  
CC expression of a CD20 gene and a nucleic acid molecule which down  
CC regulates expression of a neurite growth inhibitor gene (NOGO). The  
CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a  
CC DNazyme) an inozyme (an endolytic nucleic acid cleaving an RNA molecule  
CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) or  
CC an amberzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA  
CC with a YGY motif). The CD20-targeting nucleic acid is used to cleave RNA  
CC of CD20 in the presence of a divalent cation that is preferably Mg<sup>2+</sup>.  
CC Furthermore, it may be contacted with a cell to reduce CD20 activity of  
CC the cell and treat a patient having a condition associated with the level  
CC of CD20. The treatment may further comprise the use of one or more  
CC therapies. In particular, the CD20 targeting nucleic acid may be used to  
CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-  
CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic  
CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell  
CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,  
CC immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-  
CC targeting nucleic acid is used to cleave RNA of the NOGO gene in the  
CC presence of a divalent cation that is preferably Mg<sup>2+</sup>. Furthermore, the  
CC nucleic acid may be contacted with a cell to reduce NOGO activity of the  
CC cell and treat a patient having a condition associated with the level of  
CC NOGO. The treatment may further comprise the use of one or more  
CC therapies. In particular, the NOGO-targeting nucleic acid may be used to  
CC treat central nervous system (CNS) injury and cerebrovascular accident  
CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),  
CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),  
CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob  
CC disease, muscular dystrophy, and/or other neurodegenerative disease  
CC states which respond to the modulation of NOGO expression. The present  
CC sequence is an inozyme of the invention  
XX  
SQ Sequence 17 BP; 1 A; 13 C; 2 G; 0 T; 1 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 555 GGCTGGAGGGGGCGCG 571  
Db 17 GGCTGGAGGGGGCGCG 1

RESULT 4416  
ABK01789  
ID ABK01789 standard; RNA; 17 BP.  
XX  
AC ABK01789;  
XX  
DT 12-MAR-2002 (first entry)  
XX  
DE Human NOGO Zinzyme #111.  
XX  
KW Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;  
KW cerebroprotective; nootropic; neuroprotective; antiparkinsonian;  
KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;  
KW DNazyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia;  
KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;  
KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;

KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;  
KW inflammatory arthropathy; central nervous system injury;  
KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;  
KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;  
KW parkinson's disease; ataxia; Huntington's disease;  
KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.  
XX

OS Homo sapiens.  
OS Synthetic.

XX WO200159103-A2.

XX 16-AUG-2001.

XX 09-FEB-2001; 2001WO-US004273.

PR 11-FEB-2000; 2000US-0181797P.

PR 28-FEB-2000; 2000US-0185516P.

PR 06-MAR-2000; 2000US-0187128P.

XX (RIBO-) RIBOZYME PHARM INC.

PA (BLAT/) BLATT L.

PA (MCSW/) MCSWIGGEN J.

PA (CHOW/) CHOWRIRA B M.

XX Blatt L, Mcswiggen J, Chowrira BM;

PI WPI; 2001-607195/69.

DR Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense

XX constructs, which down regulate expression of a CD20 gene or neurite

PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and

PT central nervous system injury.

XX Claim 88; Page 97; 200pp; English.

PS The invention relates to a nucleic acid molecule which down regulates

XX expression of a CD20 gene and a nucleic acid molecule which down

CC regulates expression of a neurite growth inhibitor gene (NOGO). The

CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a

CC DNzyme) an Inozyme (an endolytic nucleic acid cleaving a NYN motif) pr

CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) pr

CC an amberzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA

CC with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA

CC of CD20 in the presence of a divalent cation that is preferably Mg<sup>2+</sup>.

CC Furthermore, it may be contacted with a cell to reduce CD20 activity of

CC the cell and treat a patient having a condition associated with the level

CC of CD20. The treatment may further comprise the use of one or more

CC therapies. In particular, the CD20 targeting nucleic acid may be used to

CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-

CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic

CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell

CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,

CC immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-

CC targetting nucleic acid is used to cleave RNA of the NOGO gene in the

CC presence of a divalent cation that is preferably Mg<sup>2+</sup>. Furthermore, the

CC nucleic acid may be contacted with a cell to reduce NOGO activity of the

CC cell and treat a patient having a condition associated with the level of

CC NOGO. The treatment may further comprise the use of one or more

CC therapies. In particular, the NOGO-targetting nucleic acid may be used to

CC treat central nervous system (CNS) injury and cerebrovascular accident

CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),

CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),

CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob

CC disease, muscular dystrophy, and/or other neurodegenerative disease

CC states which respond to the modulation of NOGO expression. The present

CC sequence is a zinzyme molecule of the invention

XX SQ Sequence 17 BP; 2 A; 6 C; 9 G; 0 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 17;

Best Local Similarity 88.2%; Pred. No. 3.2e+03;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 52 CGCGCGGGCGGGCGGCA 68

||||| ||||| ||||| |||||

Db 1 CGCGCGGGCGGGCGGCA 17

RESULT 4417

ABK00049/c

ID ABK00049 standard; RNA; 17 BP.

XX AC ABK00049;

XX DT 12-MAR-2002 (first entry)

DE Human NOGO Hammerhead Ribozyme #49.

XX Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;  
KW cerebroprotective; nootropic; neuroprotective; antiparkinsonian;  
KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;  
KW DNzyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia;  
KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;  
KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;  
KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;  
KW inflammatory arthropathy; central nervous system injury;  
KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;  
KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;  
KW Parkinson's disease; ataxia; Huntington's disease;  
KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.  
XX

OS Homo sapiens.

OS Synthetic.

XX WO200159103-A2.

XX 16-AUG-2001.

XX 09-FEB-2001; 2001WO-US004273.

XX 11-FEB-2000; 2000US-0181797P.

PR 28-FEB-2000; 2000US-0185516P.

PR 06-MAR-2000; 2000US-0187128P.

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XX Blatt L, Mcswiggen J, Chowrira BM;

PI WPI; 2001-607195/69.

XX Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense  
PT constructs, which down regulate expression of a CD20 gene or neurite  
PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and  
PT central nervous system injury.

PS Claim 88; Page 66; 200pp; English.

XX The invention relates to a nucleic acid molecule which down regulates  
CC expression of a CD20 gene and a nucleic acid molecule which down  
CC regulates expression of a neurite growth inhibitor gene (NOGO). The  
CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a  
CC DNzyme) an Inozyme (an endolytic nucleic acid cleaving a NYN motif) pr  
CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) pr  
CC an amberzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA  
CC with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA  
CC of CD20 in the presence of a divalent cation that is preferably Mg<sup>2+</sup>.

CC Furthermore, it may be contacted with a cell to reduce CD20 activity of  
CC the cell and treat a patient having a condition associated with the level  
CC of CD20. The treatment may further comprise the use of one or more  
CC therapies. In particular, the CD20 targeting nucleic acid may be used to  
CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-  
CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic





PN WO200173002-A2.  
XX 04-OCT-2001.  
PD 27-MAR-2001; 2001WO-US009761.  
XX 27-MAR-2000; 2000US-0192176P.  
PR 27-MAR-2000; 2000US-0192179P.  
PR 01-JUN-2000; 2000US-0208538P.  
PR 30-OCT-2000; 2000US-0244989P.  
XX (UYDE ) UNIV DELAWARE.  
PA Kmiec EB, Gamper HB, Rice MC;  
XX WPI; 2001-639230/73.  
PI Oligonucleotide for targeted alterations of genetic sequences and for  
XX treating cystic fibrosis, comprises at least one mismatch and chemical  
PT modification.  
PT  
XX Claim 7; Page 234; 294pp; English.  
PS The present invention provides single-stranded oligonucleotides which can  
CC be used for the targeted alteration of genomic sequences, where the  
CC oligonucleotide has at least one mismatch compared with the genomic  
CC sequence to be altered. In particular, these sequences are directed at  
CC the following genes: adenosine deaminase, p53, beta-globin,  
CC retinoblastoma, BRCA1, BRCA2, CFTR, cyclin-dependent kinase inhibitor 2A  
CC (CDKN2A), APC, Factor V, Factor VIII, Factor IX, haemoglobin alpha locus  
CC 1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6,  
CC apolipoprotein E (APOE), LDL receptor (LDLR), UDP-glucuronosyltransferase  
CC (UGT1), amyloid precursor protein (APC), presenilin-1 (PSEN1) and  
CC presenilin-2 (PSEN2). These can be used in the gene therapy of diseases  
CC such as cancer, adenosine deaminase deficiency, cystic fibrosis,  
CC haemophilia, hypercholesterolaemia, thalassaemia, sickle cell anaemia,  
CC Alzheimer's disease, melanoma, adenomatous polyposis of the colon and  
CC various syndromes. The present sequence is one of the gene correcting  
CC oligonucleotides of the invention  
XX  
SQ Sequence 17 BP; 1 A; 8 C; 6 G; 2 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1297 GCTCGCCCCAGTCTTGG 1313  
Db 1 GCTCGCCCCAGGCTTGG 17  
RESULT 4420  
ABA80616/c  
ID ABA80616 standard; DNA; 17 BP.  
XX ABA80616;  
AC 24-JAN-2002 (first entry)  
XX APOE mutation correcting oligonucleotide SEQ ID NO: 3462.  
DT Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin;  
XX retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V;  
KW cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2;  
KW adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis;  
KW haemophilia; alpha thalassaemia; haemoglobin alpha locus 1; MLH1; APOE;  
KW mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR;  
KW familial hypercholesterolaemia; UGT1; syndrome; APP; PSEN1; antisense;  
KW UDP-glucuronosyltransferase; amyloid precursor protein; presenilin-1;  
KW Alzheimer's disease; cytostatic; antischlicking; antianaemic; haemostatic;  
XX antilepemic; ss.  
OS Homo sapiens.

XX WO200173002-A2.  
PN 04-OCT-2001.  
XX 27-MAR-2001; 2001WO-US009761.  
PF 27-MAR-2000; 2000US-0192176P.  
XX 27-MAR-2000; 2000US-0192179P.  
PR 01-JUN-2000; 2000US-0208538P.  
PR 30-OCT-2000; 2000US-0244989P.  
XX (UYDE ) UNIV DELAWARE.  
PA Kmiec EB, Gamper HB, Rice MC;  
XX WPI; 2001-639230/73.  
PI Oligonucleotide for targeted alterations of genetic sequences and for  
XX treating cystic fibrosis, comprises at least one mismatch and chemical  
PT modification.  
PT  
XX Claim 7; Page 234; 294pp; English.  
PS The present invention provides single-stranded oligonucleotides which can  
CC be used for the targeted alteration of genomic sequences, where the  
CC oligonucleotide has at least one mismatch compared with the genomic  
CC sequence to be altered. In particular, these sequences are directed at  
CC the following genes: adenosine deaminase, p53, beta-globin,  
CC retinoblastoma, BRCA1, BRCA2, CFTR, cyclin-dependent kinase inhibitor 2A  
CC (CDKN2A), APC, Factor V, Factor VIII, Factor IX, haemoglobin alpha locus  
CC 1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6,  
CC apolipoprotein E (APOE), LDL receptor (LDLR), UDP-glucuronosyltransferase  
CC (UGT1), amyloid precursor protein (APC), presenilin-1 (PSEN1) and  
CC presenilin-2 (PSEN2). These can be used in the gene therapy of diseases  
CC such as cancer, adenosine deaminase deficiency, cystic fibrosis,  
CC haemophilia, hypercholesterolaemia, thalassaemia, sickle cell anaemia,  
CC Alzheimer's disease, melanoma, adenomatous polyposis of the colon and  
CC various syndromes. The present sequence is one of the gene correcting  
CC oligonucleotides of the invention  
XX  
SQ Sequence 17 BP; 2 A; 6 C; 8 G; 1 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1297 GCTCGCCCCAGTCTTGG 1313  
Db 17 GCTCGCCCCAGGCTTGG 1  
RESULT 4421  
AAH27335/c  
ID AAH27335 standard; DNA; 17 BP.  
XX AAH27335;  
AC 08-AUG-2001 (first entry)  
XX PCR primer #4.  
DT Tumour suppressor gene 16; TSG16; immune response modulator;  
XX inflammatory response modulator; signal transduction activator;  
KW cytokine inhibitor; gene therapy; anticancer; anti-inflammatory;  
KW autoimmune disorder; infection; chromosome 16q24.3; human;  
KW cellular proliferation suppressor; PCR primer; ss.  
XX Homo sapiens.  
OS WO200132861-A1.  
PN 10-MAY-2001.  
XX PD

XX 30-OCT-2000; 2000WO-AU001329.  
XX 29-OCT-1999; 99AU-00003771.  
XX (WOME-) WOMEN'S & CHILDREN'S HOSPITAL.  
XX Callen DF, Whitmore SA, Kremmidiotis G, Kochetkova M, Crawford J;  
PI WPI; 2001-316439/33.  
XX New nucleic acid representing the human tumor suppressor gene TSG16,  
PT useful e.g. for diagnosis and treatment of tumors, inflammatory and  
PT immunological disorders.  
XX Disclosure; Page 188; 215pp; English.  
XX The present invention relates to human tumour suppressor gene 16 (TSG16;  
CC see AAH23688). TSG16 was isolated from chromosome 16q24.3. TSG16  
CC suppresses cellular proliferation. TSG16 is useful for treating disorders  
CC associated with decreased expression or activity of TSG16, e.g. cancers,  
CC (auto)immune disorders, inflammation, complications of wound healing and  
CC infections (by viruses, bacteria, fungi, parasites, protozoa or  
CC helminths). The present sequence is a PCR primer, which was used in the  
CC present invention  
XX Sequence 17 BP; 0 A; 6 C; 7 G; 4 T; 0 U; 0 Other;  
SQ Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 450 CCACAGGCGAGCCGCGAG 466  
DB 17 CCACAGGCGAGCCGCGAG 1  
RESULT 4422  
ABN10667  
ID ABN10667 standard; DNA; 17 BP.  
XX ABN10667;  
XX 29-MAY-2002 (first entry)  
XX Human GDMPLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:10659.  
XX Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;  
KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;  
KW skeletal muscle disorder; amplicon; screening; ss.  
XX Homo sapiens.  
XX WO200192524-A2.  
XX 06-DEC-2001.  
XX 25-MAY-2001; 2001WO-US016981.  
XX 26-MAY-2000; 2000US-0207456P.  
XX 21-SEP-2000; 2000US-0234687P.  
XX 27-SEP-2000; 2000US-0236359P.  
XX 04-OCT-2000; 2000GB-00024263.  
XX 30-JAN-2001; 2001WO-US000661.  
XX 30-JAN-2001; 2001WO-US000662.  
XX 30-JAN-2001; 2001WO-US000663.  
XX 30-JAN-2001; 2001WO-US000664.  
XX 30-JAN-2001; 2001WO-US000665.  
XX 30-JAN-2001; 2001WO-US000666.  
XX 30-JAN-2001; 2001WO-US000667.  
XX 30-JAN-2001; 2001WO-US000668.  
XX 30-JAN-2001; 2001WO-US000669.  
XX 30-JAN-2001; 2001WO-US000670.

PR 05-FEB-2001; 2001US-0266860P.  
XX (AEOM-) AEOMICA INC.  
XX Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;  
XX WPI; 2002-179446/23.  
DR New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,  
XX or as specific biomolecule capture probes for surface-enhanced laser  
PT desorption ionization, comprises human myosin-like protein hGDMPLP-1.  
PT Disclosure; SEQ ID NO 10659; 214pp; English.  
XX The present invention describes a human genome-derived myosin-like  
CC protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-  
CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1  
CC nucleic acids can be used as probes to detect, characterise and quantify  
CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to  
CC provide initial substrates for the recombinant engineering of hGDMPLP-1  
CC protein variants having desired phenotypic improvements, and for  
CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be  
CC used as immunogens to raise antibodies that specifically recognise hGDMPLP  
CC -1 proteins, as standards in assays used to determine the concentration  
CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule  
CC capture probes for surface-enhanced laser desorption ionisation, as  
CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1  
CC production, and in vaccines or for replacement therapy. The  
CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a  
CC disorder associated with the expression of hGDMPLP-1, in particular heart  
CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.  
CC The present sequence represents an oligomer used in the screening of the  
CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.  
CC The sequence data for this patent did not form part of the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequence  
XX Sequence 17 BP; 3 A; 6 C; 7 G; 1 T; 0 U; 0 Other;  
SQ Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 477 CCGCGCGCCGAGCCGAG 493  
DB 1 CCGGTGGCCAGAGCCGAG 17  
RESULT 4423  
ABN02678  
ID ABN02678 standard; DNA; 17 BP.  
XX ABN02678;  
XX 29-MAY-2002 (first entry)  
XX Human GDMPLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:2670.  
XX Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;  
KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;  
KW skeletal muscle disorder; amplicon; screening; ss.  
XX Homo sapiens.  
XX WO200192524-A2.  
XX 06-DEC-2001.  
XX 25-MAY-2001; 2001WO-US016981.  
XX 26-MAY-2000; 2000US-0207456P.  
XX 21-SEP-2000; 2000US-0234687P.  
XX 27-SEP-2000; 2000US-0236359P.

PR 04-OCT-2000; 2000GB-00024263.  
PR 30-JAN-2001; 2001WO-US000661.  
PR 30-JAN-2001; 2001WO-US000662.  
PR 30-JAN-2001; 2001WO-US000663.  
PR 30-JAN-2001; 2001WO-US000664.  
PR 30-JAN-2001; 2001WO-US000665.  
PR 30-JAN-2001; 2001WO-US000666.  
PR 30-JAN-2001; 2001WO-US000667.  
PR 30-JAN-2001; 2001WO-US000668.  
PR 30-JAN-2001; 2001WO-US000669.  
PR 30-JAN-2001; 2001WO-US000670.  
PR 05-FEB-2001; 2001US-0266860P.  
XX  
PA (AEOM-) AEOMICA INC.  
XX  
PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;  
XX  
DR WPI; 2002-179446/23.  
XX  
PT New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,  
PT or as specific biomolecule capture probes for surface-enhanced laser  
PT desorption ionization, comprises human myosin-like protein hGDMLP-1.  
XX  
PS Disclosure; SEQ ID NO 2670; 214pp; English.  
XX  
CC The present invention describes a human genome-derived myosin-like  
CC protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-  
CC 1 can be used in gene therapy and vaccine production. The hGDMLP-1  
CC nucleic acids can be used as probes to detect, characterise and quantify  
CC hGDMLP-1 nucleic acids in samples, as amplification substrates, to  
CC provide initial substrates for the recombinant engineering of hGDMLP-1  
CC protein variants having desired phenotypic improvements, and for  
CC expressing the proteins. The hGDMLP-1 proteins or polypeptides may be  
CC used as immunogens to raise antibodies that specifically recognise hGDMLP  
CC -1 proteins, as standards in assays used to determine the concentration  
CC and/or amount specifically of hGDMLP proteins, as specific biomolecule  
CC capture probes for surface-enhanced laser desorption ionisation, as  
CC therapeutic supplement in patients having specific deficiency in hGDMLP-1  
CC production, and in vaccines or for replacement therapy. The  
CC polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a  
CC disorder associated with the expression of hGDMLP-1, in particular heart  
CC and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.  
CC The present sequence represents an oligomer used in the screening of the  
CC hGDMLP-1 sequence in the exemplification of the present invention. N.B.  
CC The sequence data for this patent did not form part of the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequence  
XX  
SQ Sequence 17 BP; 0 A; 5 C; 11 G; 1 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 44 CCCGCGCGCGCGGGG 60  
Db 1 CCTGGCGCGCGCGGGG 17  
  
RESULT 4424  
ABN10666  
ID ABN10666 standard; DNA; 17 BP.  
XX  
AC ABN10666;  
XX  
DT 29-MAY-2002 (first entry)  
XX  
DE Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:10658.  
XX  
KW Human; genome-derived myosin-like protein 1; GDMLP-1; heart;  
KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;  
KW skeletal muscle disorder; amplicon; screening; ss.  
XX

OS Homo sapiens.  
XX  
PN WO200192524-A2.  
XX  
PD 06-DEC-2001.  
XX  
PF 25-MAY-2001; 2001WO-US016981.  
XX  
PR 26-MAY-2000; 2000US-0207456P.  
PR 21-SEP-2000; 2000US-0234687P.  
PR 27-SEP-2000; 2000US-0236359P.  
PR 04-OCT-2000; 2000GB-00024263.  
PR 30-JAN-2001; 2001WO-US000661.  
PR 30-JAN-2001; 2001WO-US000662.  
PR 30-JAN-2001; 2001WO-US000663.  
PR 30-JAN-2001; 2001WO-US000664.  
PR 30-JAN-2001; 2001WO-US000665.  
PR 30-JAN-2001; 2001WO-US000666.  
PR 30-JAN-2001; 2001WO-US000667.  
PR 30-JAN-2001; 2001WO-US000668.  
PR 30-JAN-2001; 2001WO-US000669.  
PR 30-JAN-2001; 2001WO-US000670.  
PR 05-FEB-2001; 2001US-0266860P.  
XX  
PA (AEOM-) AEOMICA INC.  
XX  
PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;  
XX  
DR WPI; 2002-179446/23.  
XX  
PT New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,  
PT or as specific biomolecule capture probes for surface-enhanced laser  
PT desorption ionization, comprises human myosin-like protein hGDMLP-1.  
XX  
PS Disclosure; SEQ ID NO 10658; 214pp; English.  
XX  
CC The present invention describes a human genome-derived myosin-like  
CC protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-  
CC 1 can be used in gene therapy and vaccine production. The hGDMLP-1  
CC nucleic acids can be used as probes to detect, characterise and quantify  
CC hGDMLP-1 nucleic acids in samples, as amplification substrates, to  
CC provide initial substrates for the recombinant engineering of hGDMLP-1  
CC protein variants having desired phenotypic improvements, and for  
CC expressing the proteins. The hGDMLP-1 proteins or polypeptides may be  
CC used as immunogens to raise antibodies that specifically recognise hGDMLP  
CC -1 proteins, as standards in assays used to determine the concentration  
CC and/or amount specifically of hGDMLP proteins, as specific biomolecule  
CC capture probes for surface-enhanced laser desorption ionisation, as  
CC therapeutic supplement in patients having specific deficiency in hGDMLP-1  
CC production, and in vaccines or for replacement therapy. The  
CC polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a  
CC disorder associated with the expression of hGDMLP-1, in particular heart  
CC and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.  
CC The present sequence represents an oligomer used in the screening of the  
CC hGDMLP-1 sequence in the exemplification of the present invention. N.B.  
CC The sequence data for this patent did not form part of the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequence  
XX  
SQ Sequence 17 BP; 3 A; 7 C; 6 G; 1 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 476 CCCGGCGCGCGAGGCCA 492  
Db 1 CCCGGTGGCGAGGCCA 17  
  
RESULT 4425  
ABN07651/c  
ID ABN07651 standard; DNA; 17 BP.



XX: ABN07651;  
AC 29-MAY-2002 (first entry)  
XX Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:7643.  
DT  
XX  
DE  
XX  
KW Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;  
KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;  
KW skeletal muscle disorder; amplicon; screening; ss.  
XX  
OS Homo sapiens.  
XX  
XX WO200192524-A2.  
XX  
XX 06-DEC-2001.  
PD  
XX  
XX 25-MAY-2001; 2001WO-US016981.  
PF  
XX 26-MAY-2000; 2000US-0207456P.  
PR 21-SEP-2000; 2000US-0234687P.  
PR 27-SEP-2000; 2000US-0236359P.  
PR 04-OCT-2000; 2000GB-00024263.  
PR 30-JAN-2001; 2001WO-US000661.  
PR 30-JAN-2001; 2001WO-US000662.  
PR 30-JAN-2001; 2001WO-US000663.  
PR 30-JAN-2001; 2001WO-US000664.  
PR 30-JAN-2001; 2001WO-US000665.  
PR 30-JAN-2001; 2001WO-US000666.  
PR 30-JAN-2001; 2001WO-US000667.  
PR 30-JAN-2001; 2001WO-US000668.  
PR 30-JAN-2001; 2001WO-US000669.  
PR 30-JAN-2001; 2001WO-US000670.  
PR 05-FEB-2001; 2001US-0266860P.  
XX  
XX (AEOM-) AEOMICA INC.  
XX  
PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;  
XX WPI; 2002-179446/23.  
XX  
XX New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,  
PT or as specific biomolecule capture probes for surface-enhanced laser  
PT desorption ionization, comprises human myosin-like protein hGDMLP-1.  
XX  
XX Disclosure; SEQ ID NO 7643; 214pp; English.  
XX  
XX The present invention describes a human genome-derived myosin-like  
CC protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-  
CC 1 can be used in gene therapy and vaccine production. The hGDMLP-1  
CC nucleic acids can be used as probes to detect, characterise and quantify  
CC hGDMLP-1 nucleic acids in samples, as amplification substrates, to  
CC provide initial substrates for the recombinant engineering of hGDMLP-1  
CC protein variants having desired phenotypic improvements, and for  
CC expressing the proteins. The hGDMLP-1 proteins or polypeptides may be  
CC used as immunogens to raise antibodies that specifically recognise hGDMLP  
CC -1 proteins, as standards in assays used to determine the concentration  
CC and/or amount specifically of hGDMLP proteins, as specific biomolecule  
CC capture probes for surface-enhanced laser desorption ionisation, as  
CC therapeutic supplement in patients having specific deficiency in hGDMLP-1  
CC production, and in vaccines or for replacement therapy. The  
CC polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a  
CC disorder associated with the expression of hGDMLP-1, in particular heart  
CC and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.  
CC The present sequence represents an oligomer used in the screening of the  
CC hGDMLP-1 sequence in the exemplification of the present invention. N.B.  
CC The sequence data for this patent did not form part of the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequence  
XX  
SQ Sequence 17 BP; 9 A; 4 C; 3 G; 1 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 17;

Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1684 CTTAGTTGTTTCTCTAG 1700  
| | | | | | | | | | | | | | | | | | | | | |  
Db 17 CTTTGTGTTCTCTAG 1  
RESULT 4426  
ABN09312  
ID ABN09312 standard; DNA; 17 BP.  
XX  
AC ABN09312;  
XX  
DT 29-MAY-2002 (first entry)  
XX  
DE Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:9304.  
XX  
KW Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;  
KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;  
KW skeletal muscle disorder; amplicon; screening; ss.  
XX  
OS Homo sapiens.  
XX  
XX WO200192524-A2.  
XX  
PD 06-DEC-2001.  
XX  
XX 25-MAY-2001; 2001WO-US016981.  
PF  
XX 26-MAY-2000; 2000US-0207456P.  
PR 21-SEP-2000; 2000US-0234687P.  
PR 27-SEP-2000; 2000US-0236359P.  
PR 04-OCT-2000; 2000GB-00024263.  
PR 30-JAN-2001; 2001WO-US000661.  
PR 30-JAN-2001; 2001WO-US000662.  
PR 30-JAN-2001; 2001WO-US000663.  
PR 30-JAN-2001; 2001WO-US000664.  
PR 30-JAN-2001; 2001WO-US000665.  
PR 30-JAN-2001; 2001WO-US000666.  
PR 30-JAN-2001; 2001WO-US000667.  
PR 30-JAN-2001; 2001WO-US000668.  
PR 30-JAN-2001; 2001WO-US000669.  
PR 30-JAN-2001; 2001WO-US000670.  
PR 05-FEB-2001; 2001US-0266860P.  
XX  
XX (AEOM-) AEOMICA INC.  
XX  
PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;  
XX WPI; 2002-179446/23.  
XX  
XX New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,  
PT or as specific biomolecule capture probes for surface-enhanced laser  
PT desorption ionization, comprises human myosin-like protein hGDMLP-1.  
XX  
XX Disclosure; SEQ ID NO 9304; 214pp; English.  
XX  
XX The present invention describes a human genome-derived myosin-like  
CC protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-  
CC 1 can be used in gene therapy and vaccine production. The hGDMLP-1  
CC nucleic acids can be used as probes to detect, characterise and quantify  
CC hGDMLP-1 nucleic acids in samples, as amplification substrates, to  
CC provide initial substrates for the recombinant engineering of hGDMLP-1  
CC protein variants having desired phenotypic improvements, and for  
CC expressing the proteins. The hGDMLP-1 proteins or polypeptides may be  
CC used as immunogens to raise antibodies that specifically recognise hGDMLP  
CC -1 proteins, as standards in assays used to determine the concentration  
CC and/or amount specifically of hGDMLP proteins, as specific biomolecule  
CC capture probes for surface-enhanced laser desorption ionisation, as  
CC therapeutic supplement in patients having specific deficiency in hGDMLP-1  
CC production, and in vaccines or for replacement therapy. The  
CC polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a

CC disorder associated with the expression of hGDMLP-1, in particular heart  
CC and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.  
CC The present sequence represents an oligomer used in the screening of the  
CC hGDMLP-1 sequence in the exemplification of the present invention. N.B.  
CC The sequence data for this patent did not form part of the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequence  
XX  
SQ Sequence 17 BP; 6 A; 7 C; 3 G; 1 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 452 ACAGGCAGCCAGCAGCA 468  
Db 1 ACAGTCAGCCACCAGCA 17  
  
RESULT 4427  
ABN02070/c  
ID ABN02070 standard; DNA; 17 BP.  
XX  
AC ABN02070;  
XX  
DT 29-MAY-2002 (first entry)  
XX  
DE Human GDMLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:2062.  
XX  
KW Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;  
KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;  
KW skeletal muscle disorder; amplicon; screening; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO200192524-A2.  
XX  
PD 06-DEC-2001.  
XX  
PF 25-MAY-2001; 2001WO-US016981.  
XX  
PR 26-MAY-2000; 2000US-0207456P.  
PR 21-SEP-2000; 2000US-0234687P.  
PR 27-SEP-2000; 2000US-0236359P.  
PR 04-OCT-2000; 2000GB-00024263.  
PR 30-JAN-2001; 2001WO-US000661.  
PR 30-JAN-2001; 2001WO-US000662.  
PR 30-JAN-2001; 2001WO-US000663.  
PR 30-JAN-2001; 2001WO-US000664.  
PR 30-JAN-2001; 2001WO-US000665.  
PR 30-JAN-2001; 2001WO-US000666.  
PR 30-JAN-2001; 2001WO-US000667.  
PR 30-JAN-2001; 2001WO-US000668.  
PR 30-JAN-2001; 2001WO-US000669.  
PR 05-FEB-2001; 2001US-0266860P.  
XX  
PA (AEOM-) AEOMICA INC.  
XX  
PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;  
XX WPI; 2002-179446/23.  
DR  
PT New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,  
PT or as specific biomolecule capture probes for surface-enhanced laser  
PT desorption ionization, comprises human myosin-like protein hGDMLP-1.  
XX  
PS Disclosure; SEQ ID NO 2062; 214pp; English.  
XX  
CC The present invention describes a human genome-derived myosin-like  
CC protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-  
CC 1 can be used in gene therapy and vaccine production. The hGDMLP-1  
CC nucleic acids can be used as probes to detect, characterise and quantify

CC hGDMLP-1 nucleic acids in samples, as amplification substrates, to  
CC provide initial substrates for the recombinant engineering of hGDMLP-1  
CC protein variants having desired phenotypic improvements, and for  
CC expressing the proteins. The hGDMLP-1 proteins or polypeptides may be  
CC used as immunogens to raise antibodies that specifically recognise hGDMLP  
CC -1 proteins, as standards in assays used to determine the concentration  
CC and/or amount specifically of hGDMLP proteins, as specific biomolecule  
CC capture probes for surface-enhanced laser desorption ionisation, as  
CC therapeutic supplement in patients having specific deficiency in hGDMLP-1  
CC production, and in vaccines or for replacement therapy. The  
CC polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a  
CC disorder associated with the expression of hGDMLP-1, in particular heart  
CC and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.  
CC The present sequence represents an oligomer used in the screening of the  
CC hGDMLP-1 sequence in the exemplification of the present invention. N.B.  
CC The sequence data for this patent did not form part of the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequence  
XX

SQ Sequence 17 BP; 2 A; 7 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1365 TTGGCAGCCAGGCCATC 1381  
Db 17 TGGCAGGCAGGCCATC 1

RESULT 4428

ABN02679

ID ABN02679 standard; DNA; 17 BP.

XX ABN02679;

DT 29-MAY-2002 (first entry)

DE Human GDMLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:2671.

KW Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;  
KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;  
KW skeletal muscle disorder; amplicon; screening; ss.

OS Homo sapiens.

PN WO200192524-A2.

PD 06-DEC-2001.

PF 25-MAY-2001; 2001WO-US016981.

PR 26-MAY-2000; 2000US-0207456P.

PR 21-SEP-2000; 2000US-0234687P.

PR 27-SEP-2000; 2000US-0236359P.

PR 04-OCT-2000; 2000GB-00024263.

PR 30-JAN-2001; 2001WO-US000661.

PR 30-JAN-2001; 2001WO-US000662.

PR 30-JAN-2001; 2001WO-US000663.

PR 30-JAN-2001; 2001WO-US000664.

PR 30-JAN-2001; 2001WO-US000665.

PR 30-JAN-2001; 2001WO-US000666.

PR 30-JAN-2001; 2001WO-US000667.

PR 30-JAN-2001; 2001WO-US000668.

PR 30-JAN-2001; 2001WO-US000669.

PR 05-FEB-2001; 2001WO-US000670.

XX 05-FEB-2001; 2001US-0266860P.

PA (AEOM-) AEOMICA INC.

XX

PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;

XX WPI; 2002-179446/23.

DR

XX New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,  
PT or as specific biomolecule capture probes for surface-enhanced laser  
PT desorption ionization, comprises human myosin-like protein hGDMLP-1.  
XX  
PS Disclosure; SEQ ID NO 2671; 214pp; English.  
XX  
CC The present invention describes a human genome-derived myosin-like  
CC protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-  
CC 1 can be used in gene therapy and vaccine production. The hGDMLP-1  
CC nucleic acids can be used as probes to detect, characterise and quantify  
CC hGDMLP-1 nucleic acids in samples, as amplification substrates, to  
CC provide initial substrates for the recombinant engineering of hGDMLP-1  
CC protein variants having desired phenotypic improvements, and for  
CC expressing the proteins. The hGDMLP-1 proteins or polypeptides may be  
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CC -1 proteins, as standards in assays used to determine the concentration  
CC and/or amount specifically of hGDMLP proteins, as specific biomolecule  
CC capture probes for surface-enhanced laser desorption ionisation, as  
CC therapeutic supplement in patients having specific deficiency in hGDMLP-1  
CC production, and in vaccines or for replacement therapy. The  
CC polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a  
CC disorder associated with the expression of hGDMLP-1, in particular heart  
CC and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.  
CC The present sequence represents an oligomer used in the screening of the  
CC hGDMLP-1 sequence in the exemplification of the present invention. N.B.  
CC The sequence data for this patent did not form part of the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequence  
XX  
SQ Sequence 17 BP; 0 A; 5 C; 11 G; 1 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 45 CCGCGCGCGCGCGGCGC 61  
Db 1 CTGGCGCGCGCGGCGGC 17  
  
RESULT 4429  
ABN09313  
ID ABN09313 standard; DNA; 17 BP.  
XX  
AC ABN09313;  
XX  
DT 29-MAY-2002 (first entry)  
XX  
DE Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:9305.  
XX  
KW Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;  
KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;  
KW skeletal muscle disorder; amplicon; screening; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO200192524-A2.  
XX  
PD 06-DEC-2001.  
XX  
PF 25-MAY-2001; 2001WO-US016981.  
XX  
PR 26-MAY-2000; 2000US-0207456P.  
PR 21-SEP-2000; 2000US-0234687P.  
PR 27-SEP-2000; 2000US-0236359P.  
PR 04-OCT-2000; 2000GB-00024263.  
PR 30-JAN-2001; 2001WO-US000661.  
PR 30-JAN-2001; 2001WO-US000662.  
PR 30-JAN-2001; 2001WO-US000663.  
PR 30-JAN-2001; 2001WO-US000664.  
PR 30-JAN-2001; 2001WO-US000665.  
PR 30-JAN-2001; 2001WO-US000666.

PR 30-JAN-2001; 2001WO-US000667.  
PR 30-JAN-2001; 2001WO-US000668.  
PR 30-JAN-2001; 2001WO-US000669.  
PR 30-JAN-2001; 2001WO-US000670.  
PR 05-FEB-2001; 2001US-0266860P.  
XX  
PA (AEOM-) AEOMICA INC.  
XX  
PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;  
XX  
DR WPI; 2002-179446/23.  
XX  
PT New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,  
PT or as specific biomolecule capture probes for surface-enhanced laser  
PT desorption ionization, comprises human myosin-like protein hGDMLP-1.  
XX  
PS Disclosure; SEQ ID NO 9305; 214pp; English.  
XX  
CC The present invention describes a human genome-derived myosin-like  
CC protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-  
CC 1 can be used in gene therapy and vaccine production. The hGDMLP-1  
CC nucleic acids can be used as probes to detect, characterise and quantify  
CC hGDMLP-1 nucleic acids in samples, as amplification substrates, to  
CC provide initial substrates for the recombinant engineering of hGDMLP-1  
CC protein variants having desired phenotypic improvements, and for  
CC expressing the proteins. The hGDMLP-1 proteins or polypeptides may be  
CC used as immunogens to raise antibodies that specifically recognise hGDMLP  
CC -1 proteins, as standards in assays used to determine the concentration  
CC and/or amount specifically of hGDMLP proteins, as specific biomolecule  
CC capture probes for surface-enhanced laser desorption ionisation, as  
CC therapeutic supplement in patients having specific deficiency in hGDMLP-1  
CC production, and in vaccines or for replacement therapy. The  
CC polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a  
CC disorder associated with the expression of hGDMLP-1, in particular heart  
CC and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.  
CC The present sequence represents an oligomer used in the screening of the  
CC hGDMLP-1 sequence in the exemplification of the present invention. N.B.  
CC The sequence data for this patent did not form part of the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequence  
XX  
SQ Sequence 17 BP; 5 A; 7 C; 4 G; 1 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 453 CAGGCAGCCAGCAGCAG 469  
Db 1 CAGTCAGCCACCAGCAG 17  
  
RESULT 4430  
ABN05947  
ID ABN05947 standard; DNA; 17 BP.  
XX  
AC ABN05947;  
XX  
DT 29-MAY-2002 (first entry)  
XX  
DE Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:5939.  
XX  
KW Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;  
KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;  
KW skeletal muscle disorder; amplicon; screening; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO200192524-A2.  
XX  
PD 06-DEC-2001.  
XX  
PF 25-MAY-2001; 2001WO-US016981.



XX PR 26-MAY-2000; 2000US-0207456P.  
PR 21-SEP-2000; 2000US-0234687P.  
PR 27-SEP-2000; 2000US-0236359P.  
PR 04-OCT-2000; 2000GB-00024263.  
PR 30-JAN-2001; 2001WO-US000661.  
PR 30-JAN-2001; 2001WO-US000662.  
PR 30-JAN-2001; 2001WO-US000663.  
PR 30-JAN-2001; 2001WO-US000664.  
PR 30-JAN-2001; 2001WO-US000665.  
PR 30-JAN-2001; 2001WO-US000666.  
PR 30-JAN-2001; 2001WO-US000667.  
PR 30-JAN-2001; 2001WO-US000668.  
PR 30-JAN-2001; 2001WO-US000669.  
PR 05-FEB-2001; 2001US-0266860P.  
XX PA (AEOM-) AEOMICA INC.  
XX PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;  
XX WPI; 2002-179446/23.  
XX  
PT New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,  
PT or as specific biomolecule capture probes for surface-enhanced laser  
PT desorption ionization, comprises human myosin-like protein hGDMLP-1.  
XX PS Disclosure; SEQ ID NO 5939; 214pp; English.  
XX  
CC The present invention describes a human genome-derived myosin-like  
CC protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-  
CC 1 can be used in gene therapy and vaccine production. The hGDMLP-1  
CC nucleic acids can be used as probes to detect, characterise and quantify  
CC hGDMLP-1 nucleic acids in samples, as amplification substrates, to  
CC provide initial substrates for the recombinant engineering of hGDMLP-1  
CC protein variants having desired phenotypic improvements, and for  
CC expressing the proteins. The hGDMLP-1 proteins or polypeptides may be  
CC used as immunogens to raise antibodies that specifically recognise hGDMLP  
CC -1 proteins, as standards in assays used to determine the concentration  
CC and/or amount specifically of hGDMLP proteins, as specific biomolecule  
CC capture probes for surface-enhanced laser desorption ionisation, as  
CC therapeutic supplement in patients having specific deficiency in hGDMLP-1  
CC production, and in vaccines or for replacement therapy. The  
CC polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a  
CC disorder associated with the expression of hGDMLP-1, in particular heart  
CC and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.  
CC The present sequence represents an oligomer used in the screening of the  
CC hGDMLP-1 sequence in the exemplification of the present invention. N.B.  
CC The sequence data for this patent did not form part of the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequence  
XX SQ Sequence 17 BP; 3 A; 4 C; 8 G; 2 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 682 CCAGATGGACGAGGTGC 698  
DB 1 CCAGCTGGAGGAGGTGC 17  
  
RESULT 4431  
ABN07705  
ID ABN07705 standard; DNA; 17 BP.  
XX AC ABN07705;  
XX DT 29-MAY-2002 (first entry)  
XX DE Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:7697.  
XX

KW Human; genome-derived myosin-like protein 1; GDMLP-1; heart;  
KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;  
KW skeletal muscle disorder; amplicon; screening; ss.  
XX OS Homo sapiens.  
XX PN WO200192524-A2.  
XX PD 06-DEC-2001.  
XX PF 25-MAY-2001; 2001WO-US016981.  
XX PR 26-MAY-2000; 2000US-0207456P.  
PR 21-SEP-2000; 2000US-0234687P.  
PR 27-SEP-2000; 2000US-0236359P.  
PR 04-OCT-2000; 2000GB-00024263.  
PR 30-JAN-2001; 2001WO-US000661.  
PR 30-JAN-2001; 2001WO-US000662.  
PR 30-JAN-2001; 2001WO-US000663.  
PR 30-JAN-2001; 2001WO-US000664.  
PR 30-JAN-2001; 2001WO-US000665.  
PR 30-JAN-2001; 2001WO-US000666.  
PR 30-JAN-2001; 2001WO-US000667.  
PR 30-JAN-2001; 2001WO-US000668.  
PR 30-JAN-2001; 2001WO-US000669.  
PR 30-JAN-2001; 2001WO-US000670.  
PR 05-FEB-2001; 2001US-0266860P.  
XX PA (AEOM-) AEOMICA INC.  
XX PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;  
XX WPI; 2002-179446/23.  
XX  
PT New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,  
PT or as specific biomolecule capture probes for surface-enhanced laser  
PT desorption ionization, comprises human myosin-like protein hGDMLP-1.  
XX PS Disclosure; SEQ ID NO 7697; 214pp; English.  
XX  
CC The present invention describes a human genome-derived myosin-like  
CC protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-  
CC 1 can be used in gene therapy and vaccine production. The hGDMLP-1  
CC nucleic acids can be used as probes to detect, characterise and quantify  
CC hGDMLP-1 nucleic acids in samples, as amplification substrates, to  
CC provide initial substrates for the recombinant engineering of hGDMLP-1  
CC protein variants having desired phenotypic improvements, and for  
CC expressing the proteins. The hGDMLP-1 proteins or polypeptides may be  
CC used as immunogens to raise antibodies that specifically recognise hGDMLP  
CC -1 proteins, as standards in assays used to determine the concentration  
CC and/or amount specifically of hGDMLP proteins, as specific biomolecule  
CC capture probes for surface-enhanced laser desorption ionisation, as  
CC therapeutic supplement in patients having specific deficiency in hGDMLP-1  
CC production, and in vaccines or for replacement therapy. The  
CC polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a  
CC disorder associated with the expression of hGDMLP-1, in particular heart  
CC and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.  
CC The present sequence represents an oligomer used in the screening of the  
CC hGDMLP-1 sequence in the exemplification of the present invention. N.B.  
CC The sequence data for this patent did not form part of the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequence  
XX SQ Sequence 17 BP; 3 A; 7 C; 5 G; 2 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 605 GACCTGCTGCTGCCCA 621  
DB 1 GACCTGCAGCTGCCCA 17

XX RESULT 4432  
SQ ABN05946  
ID ABN05946 standard; DNA; 17 BP.  
XX AC ABN05946;  
XX  
DT 29-MAY-2002 (first entry)  
DE Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:5938.  
XX  
KW Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;  
KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;  
KW skeletal muscle disorder; amplicon; screening; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO200192524-A2.  
XX  
PD 06-DEC-2001.  
XX  
PF 25-MAY-2001; 2001WO-US016981.  
XX  
PR 26-MAY-2000; 2000US-0207456P.  
PR 21-SEP-2000; 2000US-0234687P.  
PR 27-SEP-2000; 2000US-0236359P.  
PR 04-OCT-2000; 2000GB-00024263.  
PR 30-JAN-2001; 2001WO-US000661.  
PR 30-JAN-2001; 2001WO-US000662.  
PR 30-JAN-2001; 2001WO-US000663.  
PR 30-JAN-2001; 2001WO-US000664.  
PR 30-JAN-2001; 2001WO-US000665.  
PR 30-JAN-2001; 2001WO-US000666.  
PR 30-JAN-2001; 2001WO-US000667.  
PR 30-JAN-2001; 2001WO-US000668.  
PR 30-JAN-2001; 2001WO-US000669.  
PR 30-JAN-2001; 2001WO-US000670.  
PR 05-FEB-2001; 2001US-0266860P.  
XX  
PA (AEOM-) AEOMICA INC.  
XX  
PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;  
XX WPI; 2002-179446/23.  
XX  
PT New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,  
PT or as specific biomolecule capture probes for surface-enhanced laser  
PT desorption ionization, comprises human myosin-like protein hGDMLP-1.  
XX  
PS Disclosure; SEQ ID NO 5938; 214pp; English.  
XX  
CC The present invention describes a human genome-derived myosin-like  
CC protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-  
CC 1 can be used in gene therapy and vaccine production. The hGDMLP-1  
CC nucleic acids can be used as probes to detect, characterise and quantify  
CC hGDMLP-1 nucleic acids in samples, as amplification substrates, to  
CC provide initial substrates for the recombinant engineering of hGDMLP-1  
CC protein variants having desired phenotypic improvements, and for  
CC expressing the proteins. The hGDMLP-1 proteins or polypeptides may be  
CC used as immunogens to raise antibodies that specifically recognise hGDMLP  
CC -1 proteins, as standards in assays used to determine the concentration  
CC and/or amount specifically of hGDMLP proteins, as specific biomolecule  
CC capture probes for surface-enhanced laser desorption ionisation, as  
CC therapeutic supplement in patients having specific deficiency in hGDMLP-1  
CC production, and in vaccines or for replacement therapy. The  
CC polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a  
CC disorder associated with the expression of hGDMLP-1, in particular heart  
CC and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.  
CC The present sequence represents an oligomer used in the screening of the  
CC hGDMLP-1 sequence in the exemplification of the present invention. N.B.  
CC The sequence data for this patent did not form part of the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequence

XX SQ Sequence 17 BP; 4 A; 3 C; 8 G; 2 T; 0 U; 0 Other;  
XX  
XX Query Match 0.5%; Score 13.8; DB 1; Length 17;  
XX Best local Similarity 88.2%; Pred. No. 3.2e+03;  
XX Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
XX  
QY 681 ACCAGATGGACGAGGTG 697  
DB 1 ACCAGCTGGAGGAGGTG 17  
XX  
XX RESULT 4433  
XX ID ABN01354/c  
XX ID ABN01354 standard; DNA; 17 BP.  
XX AC ABN01354;  
XX  
DT 29-MAY-2002 (first entry)  
DE Human GDMLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:1346.  
XX  
KW Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;  
KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;  
KW skeletal muscle disorder; amplicon; screening; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO200192524-A2.  
XX  
PD 06-DEC-2001.  
XX  
PF 25-MAY-2001; 2001WO-US016981.  
XX  
PR 26-MAY-2000; 2000US-0207456P.  
PR 21-SEP-2000; 2000US-0234687P.  
PR 27-SEP-2000; 2000US-0236359P.  
PR 04-OCT-2000; 2000GB-00024263.  
PR 30-JAN-2001; 2001WO-US000661.  
PR 30-JAN-2001; 2001WO-US000662.  
PR 30-JAN-2001; 2001WO-US000663.  
PR 30-JAN-2001; 2001WO-US000664.  
PR 30-JAN-2001; 2001WO-US000665.  
PR 30-JAN-2001; 2001WO-US000666.  
PR 30-JAN-2001; 2001WO-US000667.  
PR 30-JAN-2001; 2001WO-US000668.  
PR 30-JAN-2001; 2001WO-US000669.  
PR 30-JAN-2001; 2001WO-US000670.  
PR 05-FEB-2001; 2001US-0266860P.  
XX  
PA (AEOM-) AEOMICA INC.  
XX  
PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;  
XX WPI; 2002-179446/23.  
XX  
PT New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,  
PT or as specific biomolecule capture probes for surface-enhanced laser  
PT desorption ionization, comprises human myosin-like protein hGDMLP-1.  
XX  
PS Disclosure; SEQ ID NO 1346; 214pp; English.  
XX  
CC The present invention describes a human genome-derived myosin-like  
CC protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-  
CC 1 can be used in gene therapy and vaccine production. The hGDMLP-1  
CC nucleic acids can be used as probes to detect, characterise and quantify  
CC hGDMLP-1 nucleic acids in samples, as amplification substrates, to  
CC provide initial substrates for the recombinant engineering of hGDMLP-1  
CC protein variants having desired phenotypic improvements, and for  
CC expressing the proteins. The hGDMLP-1 proteins or polypeptides may be  
CC used as immunogens to raise antibodies that specifically recognise hGDMLP  
CC -1 proteins, as standards in assays used to determine the concentration  
CC and/or amount specifically of hGDMLP proteins, as specific biomolecule

CC capture probes for surface-enhanced laser desorption ionisation, as  
CC therapeutic supplement in patients having specific deficiency in hGDMLP-1  
CC production, and in vaccines or for replacement therapy. The  
CC polynucleotide sequence encoding hGDMLP-1 may be used for diagnosing a  
CC disorder associated with the expression of hGDMLP-1, in particular heart  
CC and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.  
CC The present sequence represents an oligomer used in the screening of the  
CC hGDMLP-1 sequence in the exemplification of the present invention. N.B.  
CC The sequence data for this patent did not form part of the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequence  
XX  
SQ Sequence 17 BP; 8 A; 0 C; 8 G; 1 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 1785 CCCCATCTTTCTCTCT 1801  
Db 17 CCCCATCTTTCTCTCT 1  
  
RESULT 4434  
ABN07650/C  
ID ABN07650 standard; DNA; 17 BP.  
XX  
AC ABN07650;  
XX  
DT 29-MAY-2002 (first entry)  
XX  
DE Human GDMLP-1 17-mex scanning SEQ ID NO:5 sequence SEQ ID NO:7642.  
XX  
KW Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;  
KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;  
KW skeletal muscle disorder; amplicon; screening; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO200192524-A2.  
XX  
PD 06-DEC-2001.  
XX  
PF 25-MAY-2001; 2001WO-US016981.  
XX  
PR 26-MAY-2000; 2000US-0207456P.  
PR 21-SEP-2000; 2000US-0234687P.  
PR 27-SEP-2000; 2000US-0236359P.  
PR 04-OCT-2000; 2000GB-00024263.  
PR 30-JAN-2001; 2001WO-US000661.  
PR 30-JAN-2001; 2001WO-US000662.  
PR 30-JAN-2001; 2001WO-US000663.  
PR 30-JAN-2001; 2001WO-US000664.  
PR 30-JAN-2001; 2001WO-US000665.  
PR 30-JAN-2001; 2001WO-US000666.  
PR 30-JAN-2001; 2001WO-US000667.  
PR 30-JAN-2001; 2001WO-US000668.  
PR 30-JAN-2001; 2001WO-US000669.  
PR 30-JAN-2001; 2001WO-US000670.  
PR 05-FEB-2001; 2001US-0266860P.  
XX  
PA (AEOM-) AEOMICA INC.  
XX  
PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;  
XX  
DR WPI; 2002-179446/23.  
XX  
PT New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,  
PT or as specific biomolecule capture probes for surface-enhanced laser  
PT desorption ionization, comprises human myosin-like protein hGDMLP-1.  
XX  
PS Disclosure; SEQ ID NO 7642; 214pp; English.

CC The present invention describes a human genome-derived myosin-like  
CC protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-  
CC 1 can be used in gene therapy and vaccine production. The hGDMLP-1  
CC nucleic acids can be used as probes to detect, characterise and quantify  
CC hGDMLP-1 nucleic acids in samples, as amplification substrates, to  
CC provide initial substrates for the recombinant engineering of hGDMLP-1  
CC protein variants having desired phenotypic improvements, and for  
CC expressing the proteins. The hGDMLP-1 proteins or polypeptides may be  
CC used as immunogens to raise antibodies that specifically recognise hGDMLP  
CC -1 proteins, as standards in assays used to determine the concentration  
CC and/or amount specifically of hGDMLP proteins, as specific biomolecule  
CC capture probes for surface-enhanced laser desorption ionisation, as  
CC therapeutic supplement in patients having specific deficiency in hGDMLP-1  
CC production, and in vaccines or for replacement therapy. The  
CC polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a  
CC disorder associated with the expression of hGDMLP-1, in particular heart  
CC and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.  
CC The present sequence represents an oligomer used in the screening of the  
CC hGDMLP-1 sequence in the exemplification of the present invention. N.B.  
CC The sequence data for this patent did not form part of the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequence  
XX  
SQ Sequence 17 BP; 9 A; 4 C; 3 G; 1 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 1685 TTAGTTGTTTCTCTAGC 1701  
Db 17 TTTGTTGGTTCTCTAGC 1  
  
RESULT 4435  
ABQ63368  
ID ABQ63368 standard; DNA; 17 BP.  
XX  
AC ABQ63368;  
XX  
DT 20-AUG-2002 (first entry)  
XX  
DE Human KTOM1a portion (ABQ63232) probe # 81.  
XX  
KW Human; KTOM1a; KTOM1; kidney tumour overexpressed membrane; cytostatic;  
KW gene therapy; cancer; kidney; liver; bone marrow; brain; heart; lung;  
KW kidney; colon; skeletal muscle; testis; uterus; placenta; probe; ss.  
OS Homo sapiens.  
XX  
PN WO200224750-A2.  
XX  
PD 28-MAR-2002.  
XX  
PF 21-SEP-2001; 2001WO-US029656.  
XX  
PR 21-SEP-2000; 2000US-0234687P.  
PR 27-SEP-2000; 2000US-0236359P.  
PR 04-OCT-2000; 2000GB-00024263.  
PR 30-JAN-2001; 2001WO-US000661.  
PR 30-JAN-2001; 2001WO-US000662.  
PR 30-JAN-2001; 2001WO-US000663.  
PR 30-JAN-2001; 2001WO-US000664.  
PR 30-JAN-2001; 2001WO-US000665.  
PR 30-JAN-2001; 2001WO-US000666.  
PR 30-JAN-2001; 2001WO-US000667.  
PR 30-JAN-2001; 2001WO-US000668.  
PR 30-JAN-2001; 2001WO-US000669.  
PR 30-JAN-2001; 2001WO-US000670.  
PR 23-MAY-2001; 2001US-00864761.  
PR 28-AUG-2001; 2001US-0315676P.  
XX  
PA (AEOM-) AEOMICA INC.



XX Zhang J;  
PI  
XX WPI; 2002-479509/51.  
DR  
XX New human kidney tumor overexpressed membrane (KTOM1) protein and nucleic  
PT acids encoding the protein, useful for treating subjects having defects  
PT in KTOM1 which can manifest as cancer of the kidney, or as a disorder of  
PT e.g., liver or bone.  
XX  
PS Example 2; Page 168; 418pp; English.  
XX  
CC The invention relates to a novel isolated nucleic acid encoding human  
CC KTOM1 (kidney tumour overexpressed membrane) protein. The protein of the  
CC invention has cytostatic activity. The nucleotide may have a use in gene  
CC therapy. The KTOM1 nucleic acids may be used to diagnose, treat or  
CC monitor a disease caused by altered expression of human KTOM1.  
CC Compositions comprising the nucleic acids, proteins or antibodies may be  
CC used to treat subjects having defects in KTOM1 which can manifest as  
CC cancer of the kidney, as well as a disorder of liver, bone marrow, brain,  
CC heart, lung, kidney, colon, skeletal muscle, testis, uterus and placenta  
CC function. The sequence represents a probe used in the invention to scan  
CC the nt 1-1001 portion of human KTOM1a (ABQ63232)  
XX  
SQ Sequence 17 BP; 3 A; 4 C; 5 G; 5 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 161 GAGCCCATGTTGTGGAA 177  
Db 1 GACTCCCTGTTGTGGAA 17  
  
RESULT 4436  
ABQ64270/c  
ID ABQ64270 standard; DNA; 17 BP.  
XX  
AC ABQ64270;  
XX  
DT 20-AUG-2002 (first entry)  
XX  
DE Human KTOM1a portion (ABQ63232) probe # 983.  
XX  
KW Human; KTOM1a; KTOM1; kidney tumour overexpressed membrane; cytostatic;  
KW gene therapy; cancer; kidney; liver; bone marrow; brain; heart; lung;  
KW kidney; colon; skeletal muscle; testis; uterus; placenta; probe; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO200224750-A2.  
XX  
PD 28-MAR-2002.  
XX  
PF 21-SEP-2001; 2001WO-US029656.  
XX  
PR 21-SEP-2000; 2000US-0234687P.  
PR 27-SEP-2000; 2000US-0236359P.  
PR 04-OCT-2000; 2000GB-00024263.  
PR 30-JAN-2001; 2001WO-US000661.  
PR 30-JAN-2001; 2001WO-US000662.  
PR 30-JAN-2001; 2001WO-US000663.  
PR 30-JAN-2001; 2001WO-US000664.  
PR 30-JAN-2001; 2001WO-US000665.  
PR 30-JAN-2001; 2001WO-US000666.  
PR 30-JAN-2001; 2001WO-US000667.  
PR 30-JAN-2001; 2001WO-US000668.  
PR 30-JAN-2001; 2001WO-US000669.  
PR 30-JAN-2001; 2001WO-US000670.  
PR 23-MAY-2001; 2001US-00864761.  
PR 28-AUG-2001; 2001US-0315676P.  
XX

PA (AEOM-) AEOMICA INC.  
XX  
PI Zhang J;  
XX  
DR WPI; 2002-479509/51.  
XX  
PT New human kidney tumor overexpressed membrane (KTOM1) protein and nucleic  
PT acids encoding the protein, useful for treating subjects having defects  
PT in KTOM1 which can manifest as cancer of the kidney, or as a disorder of  
PT e.g., liver or bone.  
XX  
PS Example 2; Page 286; 418pp; English.  
XX  
CC The invention relates to a novel isolated nucleic acid encoding human  
CC KTOM1 (kidney tumour overexpressed membrane) protein. The protein of the  
CC invention has cytostatic activity. The nucleotide may have a use in gene  
CC therapy. The KTOM1 nucleic acids may be used to diagnose, treat or  
CC monitor a disease caused by altered expression of human KTOM1.  
CC Compositions comprising the nucleic acids, proteins or antibodies may be  
CC used to treat subjects having defects in KTOM1 which can manifest as  
CC cancer of the kidney, as well as a disorder of liver, bone marrow, brain,  
CC heart, lung, kidney, colon, skeletal muscle, testis, uterus and placenta  
CC function. The sequence represents a probe used in the invention to scan  
CC the nt 1-1001 portion of human KTOM1a (ABQ63232)  
XX  
SQ Sequence 17 BP; 2 A; 5 C; 8 G; 2 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 464 CAGCAGGCCTGGCCCGG 480  
Db 17 CAGCATCCCTGGCCCGG 1  
  
RESULT 4437  
ABQ64271/c  
ID ABQ64271 standard; DNA; 17 BP.  
XX  
AC ABQ64271;  
XX  
DT 20-AUG-2002 (first entry)  
XX  
DE Human KTOM1a portion (ABQ63232) probe # 984.  
XX  
KW Human; KTOM1a; KTOM1; kidney tumour overexpressed membrane; cytostatic;  
KW gene therapy; cancer; kidney; liver; bone marrow; brain; heart; lung;  
KW kidney; colon; skeletal muscle; testis; uterus; placenta; probe; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO200224750-A2.  
XX  
PD 28-MAR-2002.  
XX  
PF 21-SEP-2001; 2001WO-US029656.  
XX  
PR 21-SEP-2000; 2000US-0234687P.  
PR 27-SEP-2000; 2000US-0236359P.  
PR 04-OCT-2000; 2000GB-00024263.  
PR 30-JAN-2001; 2001WO-US000661.  
PR 30-JAN-2001; 2001WO-US000662.  
PR 30-JAN-2001; 2001WO-US000663.  
PR 30-JAN-2001; 2001WO-US000664.  
PR 30-JAN-2001; 2001WO-US000665.  
PR 30-JAN-2001; 2001WO-US000666.  
PR 30-JAN-2001; 2001WO-US000667.  
PR 30-JAN-2001; 2001WO-US000668.  
PR 30-JAN-2001; 2001WO-US000669.  
PR 30-JAN-2001; 2001WO-US000670.  
PR 23-MAY-2001; 2001US-00864761.  
PR 28-AUG-2001; 2001US-0315676P.  
XX

```
XX (AEOM-) AEOMICA INC.
PA
XX
XX Zhang J;
XX WPI; 2002-479509/51.
XX
XX New human kidney tumor overexpressed membrane (KTOM1) protein and nucleic
PT acids encoding the protein, useful for treating subjects having defects
PT in KTOM1 which can manifest as cancer of the kidney, or as a disorder of
PT e.g., liver or bone.
XX
XX Example 2; Page 286; 418pp; English.
XX
XX The invention relates to a novel isolated nucleic acid encoding human
CC KTOM1 (kidney tumour overexpressed membrane) protein. The protein of the
CC invention has cytostatic activity. The nucleotide may have a use in gene
CC therapy. The KTOM1 nucleic acids may be used to diagnose, treat or
CC monitor a disease caused by altered expression of human KTOM1.
CC Compositions comprising the nucleic acids, proteins or antibodies may be
CC used to treat subjects having defects in KTOM1 which can manifest as
CC cancer of the kidney, as well as a disorder of liver, bone marrow, brain,
CC heart, lung, kidney, colon, skeletal muscle, testis, uterus and placenta
CC function. The sequence represents a probe used in the invention to scan
CC the nt 1-1001 portion of human KTOM1a (ABQ63232)
XX
XX Sequence 17 BP; 2 A; 5 C; 8 G; 2 T; 0 U; 0 Other;
SQ
Query Match 0.5%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 3.2e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 463 GCAGCAGGCCTGGCCG 479
Db 17 GCAGCATCCCTGGCCG 1
RESULT 4438
ABQ64272/c
ID ABQ64272 standard; DNA; 17 BP.
XX
AC ABQ64272;
XX
XX 20-AUG-2002 (first entry)
DT
XX Human KTOM1a portion (ABQ63232) probe # 985.
DE
XX Human; KTOM1a; KTOM1; kidney tumour overexpressed membrane; cytostatic;
KW gene therapy; cancer; kidney; liver; bone marrow; brain; heart; lung;
KW kidney; colon; skeletal muscle; testis; uterus; placenta; probe; ss.
XX
OS Homo sapiens.
XX
XX WO200224750-A2.
PN
XX
XX 28-MAR-2002.
PD
XX
XX 21-SEP-2001; 2001WO-US029656.
PF
XX
XX 21-SEP-2000; 2000US-0234687P.
PR
XX 27-SEP-2000; 2000US-0236359P.
PR
XX 04-OCT-2000; 2000GB-00024263.
PR
XX 30-JAN-2001; 2001WO-US000661.
PR
XX 30-JAN-2001; 2001WO-US000662.
PR
XX 30-JAN-2001; 2001WO-US000663.
PR
XX 30-JAN-2001; 2001WO-US000664.
PR
XX 30-JAN-2001; 2001WO-US000665.
PR
XX 30-JAN-2001; 2001WO-US000666.
PR
XX 30-JAN-2001; 2001WO-US000667.
PR
XX 30-JAN-2001; 2001WO-US000668.
PR
XX 30-JAN-2001; 2001WO-US000669.
PR
XX 30-JAN-2001; 2001WO-US000670.
PR
XX 23-MAY-2001; 2001US-00864761.
PR
PR
XX 28-AUG-2001; 2001US-0315676P.
XX
XX (AEOM-) AEOMICA INC.
XX
XX Zhang J;
XX WPI; 2002-479509/51.
XX
XX New human kidney tumor overexpressed membrane (KTOM1) protein and nucleic
PT acids encoding the protein, useful for treating subjects having defects
PT in KTOM1 which can manifest as cancer of the kidney, or as a disorder of
PT e.g., liver or bone.
XX
XX Example 2; Page 286; 418pp; English.
XX
XX The invention relates to a novel isolated nucleic acid encoding human
CC KTOM1 (kidney tumour overexpressed membrane) protein. The protein of the
CC invention has cytostatic activity. The nucleotide may have a use in gene
CC therapy. The KTOM1 nucleic acids may be used to diagnose, treat or
CC monitor a disease caused by altered expression of human KTOM1.
CC Compositions comprising the nucleic acids, proteins or antibodies may be
CC used to treat subjects having defects in KTOM1 which can manifest as
CC cancer of the kidney, as well as a disorder of liver, bone marrow, brain,
CC heart, lung, kidney, colon, skeletal muscle, testis, uterus and placenta
CC function. The sequence represents a probe used in the invention to scan
CC the nt 1-1001 portion of human KTOM1a (ABQ63232)
XX
XX Sequence 17 BP; 2 A; 4 C; 8 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.5%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 3.2e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 462 AGCAGCAGGCCTGGCCC 478
Db 17 AGCAGCATCCCTGGCCC 1
RESULT 4439
ABQ63367
ID ABQ63367 standard; DNA; 17 BP.
XX
AC ABQ63367;
XX
XX 20-AUG-2002 (first entry)
DT
XX Human KTOM1a portion (ABQ63232) probe # 80.
DE
XX Human; KTOM1a; KTOM1; kidney tumour overexpressed membrane; cytostatic;
KW gene therapy; cancer; kidney; liver; bone marrow; brain; heart; lung;
KW kidney; colon; skeletal muscle; testis; uterus; placenta; probe; ss.
XX
OS Homo sapiens.
XX
XX WO200224750-A2.
PN
XX
XX 28-MAR-2002.
PD
XX
XX 21-SEP-2001; 2001WO-US029656.
PF
XX
XX 21-SEP-2000; 2000US-0234687P.
PR
XX 27-SEP-2000; 2000US-0236359P.
PR
XX 04-OCT-2000; 2000GB-00024263.
PR
XX 30-JAN-2001; 2001WO-US000661.
PR
XX 30-JAN-2001; 2001WO-US000662.
PR
XX 30-JAN-2001; 2001WO-US000663.
PR
XX 30-JAN-2001; 2001WO-US000664.
PR
XX 30-JAN-2001; 2001WO-US000665.
PR
XX 30-JAN-2001; 2001WO-US000666.
PR
XX 30-JAN-2001; 2001WO-US000667.
PR
XX 30-JAN-2001; 2001WO-US000668.
PR
XX 30-JAN-2001; 2001WO-US000669.
PR
XX 30-JAN-2001; 2001WO-US000670.
PR
XX 23-MAY-2001; 2001US-00864761.
PR
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PR 23-MAY-2001; 2001US-00864761.  
PR 28-AUG-2001; 2001US-0315676P.

XX (AEOM-) AEOMICA INC.

XX Zhang J;

XX WPI; 2002-479509/51.

XX New human kidney tumor overexpressed membrane (KTOM1) protein and nucleic  
PT acids encoding the protein, useful for treating subjects having defects  
PT in KTOM1 which can manifest as cancer of the kidney, or as a disorder of  
PT e.g., liver or bone.

XX Example 2; Page 168; 418pp; English.

XX The invention relates to a novel isolated nucleic acid encoding human  
CC KTOM1 (kidney tumour overexpressed membrane) protein. The protein of the  
CC invention has cytostatic activity. The nucleotide may have a use in gene  
CC therapy. The KTOM1 nucleic acids may be used to diagnose, treat or  
CC monitor a disease caused by altered expression of human KTOM1.  
CC Compositions comprising the nucleic acids, proteins or antibodies may be  
CC used to treat subjects having defects in KTOM1 which can manifest as  
CC cancer of the kidney, as well as a disorder of liver, bone marrow, brain,  
CC heart, lung, kidney, colon, skeletal muscle, testis, uterus and placenta  
CC function. The sequence represents a probe used in the invention to scan  
CC the nt 1-1001 portion of human KTOM1a (ABQ63232)

XX Sequence 17 BP; 2 A; 4 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 160 GGACGCCCATGTTGTGGA 176  
Db ||||| ||||| ||||| |||||  
1 GGACTCCCTGTTGTGGA 17

RESULT 4440  
ABK27279  
ID ABK27279 standard; DNA; 17 BP.

XX ABK27279;

AC 09-APR-2002 (first entry)

XX Reduced linolenic acid production genome altering oligonucleotide #175.

XX Chromosomal genomic alteration; genome altering oligonucleotide; PCR; ss;  
KW o-methyl modification; LNA modification; phosphorothioate linkage;  
KW DNA repair; DNA alteration; environmental tolerance; hygromycin-B;  
KW abiotic stress tolerance; improved nutritional value; hygromycin; primer;  
KW amino acid over production; herbicide resistance; glyphosate resistance;  
KW imidazolinone herbicide resistance; triazine resistance; disease resistance;  
KW porphyric herbicide resistance; sulphonylurea herbicide resistance;  
KW modified oil production; modified starch production; waxy starch;  
KW altered floral morphology; male-sterile plant; albino mutant;  
KW modified fatty acid content; reduced palmitate production; albino plant;  
KW increased stearate production; reduced linolenic acid production;  
KW photosynthetic process.

XX Zea mays.

OS Synthetic.

XX WO200192512-A2.

XX 06-DEC-2001.

XX 01-JUN-2001; 2001WO-US017672.

XX 01-JUN-2000; 2000US-0208538P.

PR 30-OCT-2000; 2000US-0244989P.

PR 27-MAR-2001; 2001US-00818875.

XX (UYDE ) UNIV DELAWARE.

XX Kmiec EB, Gamper HB, Rice MC, Kim J;

XX WPI; 2002-106307/14.

XX New oligonucleotides with modified nuclease-resistant termini, useful for  
PT creating plants with desired phenotypes, e.g. stress tolerance, improved  
PT nutritional value, herbicide or disease resistance, or modified oil  
PT production.

XX Claim 7; Page 200; 220pp; English.

XX The invention relates to an oligonucleotide for targeted alteration of a  
CC genetic sequence, which comprises a single-stranded oligonucleotide  
CC having a DNA domain. The DNA domain has at least one mismatch with  
CC respect to the genetic sequence to be altered and further comprises  
CC chemical modifications of the oligonucleotide. The chemical modifications  
CC consist of o-methyl modification, an LNA modification, two or more  
CC phosphorothioate linkages on a terminus, or a combination of any two or  
CC more of these modifications. The oligonucleotides are useful for  
CC directing repair or alteration of plant genetic information. The  
CC oligonucleotides are particularly useful for creating plants with desired  
CC phenotypes, e.g. environmental or abiotic stress tolerance, improved  
CC nutritional value (e.g. altering amino acid content of plants or  
CC conferring amino acid over production), herbicide resistance (e.g.  
CC glyphosate resistance, imidazolinone and sulphonylurea herbicide  
CC resistance, porphyric herbicide resistance or triazine resistance),  
CC disease resistance, modified oil production, modified starch production  
CC (e.g. increased starch or production of waxy starch), altered floral  
CC morphology (e.g. male-sterile plants) or modified fatty acid content  
CC (e.g. reduced palmitate, increased stearate or reduced linolenic acid).  
CC The oligonucleotides are also useful for producing albino mutants for the  
CC analysis of photosynthetic processes. This sequence represents a genome  
CC altering oligonucleotide of the invention

XX Sequence 17 BP; 1 A; 8 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 566 GCGCGGGTGAGCGCCCG 582  
Db ||||| ||||| ||||| |||||  
1 GCGCGGGTGACCCCCCG 17

RESULT 4441  
ABK27280/c

ID ABK27280 standard; DNA; 17 BP.

XX ABK27280;

XX 09-APR-2002 (first entry)

XX Reduced linolenic acid production genome altering oligonucleotide #176.

XX Chromosomal genomic alteration; genome altering oligonucleotide; PCR; ss;  
KW o-methyl modification; LNA modification; phosphorothioate linkage;  
KW DNA repair; DNA alteration; environmental tolerance; hygromycin-B;  
KW abiotic stress tolerance; improved nutritional value; hygromycin; primer;  
KW amino acid over production; herbicide resistance; glyphosate resistance;  
KW imidazolinone herbicide resistance; triazine resistance; disease resistance;  
KW porphyric herbicide resistance; sulphonylurea herbicide resistance;  
KW modified oil production; modified starch production; waxy starch;  
KW altered floral morphology; male-sterile plant; albino mutant;  
KW modified fatty acid content; reduced palmitate production; albino plant;  
KW increased stearate production; reduced linolenic acid production;  
KW photosynthetic process.

XX Zea mays.

OS



OS Synthetic.  
XX WO200192512-A2.  
PN  
XX  
PD 06-DEC-2001.  
XX  
XX  
PF 01-JUN-2001; 2001WO-US017672.  
XX  
XX  
PR 01-JUN-2000; 2000US-0208538P.  
PR 30-OCT-2000; 2000US-0244989P.  
PR 27-MAR-2001; 2001US-00818875.  
XX  
XX  
PA (UYDE ) UNIV DELAWARE.  
XX  
XX  
PI Kmiec EB, Gamper HB, Rice MC, Kim J;  
XX  
XX WPI; 2002-106307/14.  
XX  
XX  
PT New oligonucleotides with modified nuclease-resistant termini, useful for  
PT creating plants with desired phenotypes, e.g. stress tolerance, improved  
PT nutritional value, herbicide or disease resistance, or modified oil  
PT production.  
XX  
XX  
PS Claim 7; Page 200; 220pp; English.  
XX  
XX  
CC The invention relates to an oligonucleotide for targeted alteration of a  
CC genetic sequence, which comprises a single-stranded oligonucleotide  
CC having a DNA domain. The DNA domain has at least one mismatch with  
CC respect to the genetic sequence to be altered and further comprises  
CC chemical modifications of the oligonucleotide. The chemical modifications  
CC consist of o-methyl modification, an LNA modification, two or more  
CC phosphorothioate linkages on a terminus, or a combination of any two or  
CC more of these modifications. The oligonucleotides are useful for  
CC directing repair or alteration of plant genetic information. The  
CC oligonucleotides are particularly useful for creating plants with desired  
CC phenotypes, e.g. environmental or abiotic stress tolerance, improved  
CC nutritional value (e.g. altering amino acid content of plants or  
CC conferring amino acid over production), herbicide resistance (e.g.  
CC glyphosate resistance, imidazolinone and sulphonylurea herbicide  
CC resistance, porphyrin herbicide resistance or triazine resistance),  
CC disease resistance, modified oil production, modified starch production  
CC (e.g. increased starch or production of waxy starch), altered floral  
CC morphology (e.g. male-sterile plants) or modified fatty acid content  
CC (e.g. reduced palmitate, increased stearate or reduced linolenic acid).  
CC The oligonucleotides are also useful for producing albino mutants for the  
CC analysis of photosynthetic processes. This sequence represents a genome  
CC altering oligonucleotide of the invention  
XX  
SQ Sequence 17 BP; 1 A; 7 C; 8 G; 1 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 566 GGCGCGGTGAGCGCCG 582  
Db |||||  
17 GGCGCGGTGACCCCG 1  
  
RESULT 4442  
ABV83073  
ID ABV83073 standard; DNA; 17 BP.  
AC ABV83073;  
XX  
XX 03-JAN-2003 (first entry)  
DT  
XX Human HTPL scanning oligonucleotide SEQ ID 4319.  
DE  
XX  
KW Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1;  
KW human testis expressed Patched like protein; testis; adrenal; liver;  
KW male germ cell development; bone marrow; brain; kidney; lung; placenta;  
KW prostate; skeletal muscle; colon; male infertility; cancer; ss.

XX Homo sapiens.  
OS  
XX  
XX  
PN EP1229046-A2.  
XX  
XX  
PD 07-AUG-2002.  
XX  
XX  
PF 28-JAN-2002; 2002EP-00001167.  
XX  
XX  
PR 30-JAN-2001; 2001WO-US000663.  
PR 30-JAN-2001; 2001WO-US000664.  
PR 30-JAN-2001; 2001WO-US000665.  
PR 30-JAN-2001; 2001WO-US000667.  
PR 30-JAN-2001; 2001WO-US000668.  
PR 30-JAN-2001; 2001WO-US000669.  
PR 23-MAY-2001; 2001US-00864761.  
PR 09-OCT-2001; 2001US-0327898P.  
XX  
XX (AEOM-) AEOMICA INC.  
PA  
XX  
XX Zhan J;  
PI  
XX  
XX WPI; 2002-676582/73.  
XX  
XX  
PT Novel isolated human testis expressed Patched like protein (HTPL), useful  
PT for identifying agonist and antagonist and specific binding partners, and  
PT for treating subjects having defects in HTPL.  
XX  
XX  
PS Example 2; Page 630; 718pp; English.  
XX  
XX  
CC The present invention relates to human testis expressed Patched like  
CC protein (HTPL, see ABV78759 to ABV78762 and ABV8519 to ABV8520). HTPL  
CC has two isoforms, with a few single base pair differences between the  
CC two. One of the single base pair changes introduces a premature stop  
CC codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL  
CC shares an overall structure organisation with the Patched protein. The  
CC shared structural features strongly imply that HTPL plays a role similar  
CC to that of Patched, and is a potential tumour suppressor. HTPL is  
CC important in regulating male germ cell development, and the HTPL gene was  
CC mapped to human chromosome 10p12.1. HTPL and its coding sequence are  
CC useful for diagnosing a disorder caused by mutation in HTPL, and in  
CC therapy and manufacture of a medicament for treatment or prevention of  
CC such disorder associated with decreased expression or activity of human  
CC HTPL. Such disorders include disorders of testis, or adrenal, adult and  
CC foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,  
CC skeletal muscle or colon function. HTPL proteins and nucleic acids are  
CC clinically useful diagnostic markers. HTPL proteins and nucleic acids for  
CC male infertility and cancer. The present oligonucleotide was used in an  
CC example from the invention  
XX  
SQ Sequence 17 BP; 6 A; 0 C; 3 G; 8 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 2251 AAGCTTTATTGCAAT 2267  
Db |||||  
1 AAGGTTTATTGAATAT 17  
  
RESULT 4443  
ABV83072  
ID ABV83072 standard; DNA; 17 BP.  
XX  
XX AC ABV83072;  
XX  
XX DT 03-JAN-2003 (first entry)  
XX  
XX Human HTPL scanning oligonucleotide SEQ ID 4318.  
DE  
XX  
XX Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1;  
KW human testis expressed Patched like protein; testis; adrenal; liver;

KW male germ cell development; bone marrow; brain; kidney; lung; placenta;  
KW prostate; skeletal muscle; colon; male infertility; cancer; ss.  
XX Homo sapiens.  
OS  
XX  
XX  
PN EP1229046-A2.  
XX  
XX  
PD 07-AUG-2002.  
XX  
XX 28-JAN-2002; 2002EP-00001167.  
XX  
XX 30-JAN-2001; 2001WO-US000663.  
PR 30-JAN-2001; 2001WO-US000664.  
PR 30-JAN-2001; 2001WO-US000665.  
PR 30-JAN-2001; 2001WO-US000667.  
PR 30-JAN-2001; 2001WO-US000668.  
PR 30-JAN-2001; 2001WO-US000669.  
PR 23-MAY-2001; 2001US-00864761.  
PR 09-OCT-2001; 2001US-0327898P.  
XX  
XX (AEOM-) AEOMICA INC.  
PA  
XX  
XX Zhan J;  
PI  
XX  
XX WPI; 2002-676582/73.  
DR  
XX  
XX Novel isolated human testis expressed Patched like protein (HTPL), useful  
PT for identifying agonist and antagonist and specific binding partners, and  
PT for treating subjects having defects in HTPL.  
XX  
XX  
PS Example 2; Page 630; 718pp; English.  
XX  
XX The present invention relates to human testis expressed Patched like  
CC protein (HTPL, see ABV78759 to ABV78762 and AB98519 to AB98520). HTPL  
CC has two isoforms, with a few single base pair differences between the  
CC two. One of the single base pair changes introduces a premature stop  
CC codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL  
CC shares an overall structure organisation with the Patched protein. The  
CC shared structural features strongly imply that HTPL plays a role similar  
CC to that of Patched, and is a potential tumour suppressor. HTPL is  
CC important in regulating male germ cell development, and the HTPL gene was  
CC mapped to human chromosome 10p12.1. HTPL and its coding sequence are  
CC useful for diagnosing a disorder caused by mutation in HTPL, and in  
CC therapy and manufacture of a medicament for treatment or prevention of  
CC such disorder associated with decreased expression or activity of human  
CC HTPL. Such disorders include disorders of testis, or adrenal, adult and  
CC foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,  
CC skeletal muscle or colon function. HTPL proteins and nucleic acids are  
CC clinically useful diagnostic markers and potential therapeutic agents for  
CC male infertility and cancer. The present oligonucleotide was used in an  
CC example from the invention  
XX  
SQ Sequence 17 BP; 6 A; 0 C; 4 G; 7 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 2250 GAAGCTTTATTTGCATA 2266  
DB 1 GAAGGTTTATTGAATA 17  
RESULT 4444  
ABK17920/c  
ID ABK17920 standard; RNA; 17 BP.  
XX  
XX  
AC ABK17920;  
XX  
DT 09-APR-2002 (first entry)  
XX  
XX Human ERG hammerhead ribozyme target sequence, Seq ID No 567.  
XX

KW Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;  
KW ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;  
KW vulnarary; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;  
KW tumour angiogenesis; diabetic retinopathy; macular degeneration;  
KW neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;  
KW angicfibroma of tuberous sclerosis; port-wine stain; wound healing;  
KW Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;  
KW Osler-Weber-rendu syndrome, leukaemia; osteoporosis; DNAzyme; inozyme;  
KW amberzyme.  
XX  
XX Homo sapiens.  
XX  
PN WO20C188124-A2.  
XX  
PD 22-NOV-2001.  
XX  
PF 16-MAY-2001; 2001WO-US015866.  
XX  
XX 16-MAY-2000; 2000US-00572021.  
PR  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
PA (GLAXO) GLAXO GROUP LTD.  
XX  
XX Jarvis T, Von Carlowitz I, Mcswiggen JA, McLaughlin F, Randi AM;  
PI  
XX WPI; 2002-082995/11.  
DR  
XX  
XX Novel polynucleotide which down regulates expression of Ets-related gene,  
PT useful for treating cancer, diabetic retinopathy, macular degeneration,  
PT arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.  
XX  
XX Claim 4; Page 69; 149pp; English.  
PS  
XX The invention relates to a nucleic acid molecule (I) which down regulates  
CC expression of an Ets-related gene (ERG). (I) is useful for treating  
CC conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,  
CC tumour angiogenesis, diabetic retinopathy, macular degeneration,  
CC neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca  
CC vulgaris, angiofibroma of tuberous sclerosis, port-wine stains, Sturge  
CC Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu  
CC syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for  
CC treating a patient having a condition associated with the level of ERG,  
CC by contacting cells of the patient with (I) under conditions suitable for  
CC the treatment. The method comprises the use of one or more therapies  
CC under conditions suitable for the treatment. Leukaemia or tumour  
CC angiogenesis is treated by administering (I) to the patient in  
CC conjunction with one or more of other therapies such as radiation or  
CC chemotherapy treatment. (I) is useful for reducing ERG activity in a  
CC cell, by contacting the cell with (I). (I) is useful for cleaving RNA of  
CC ERG gene, by contacting (I) with RNA, in the presence of a divalent  
CC cation such as Mg2+. (I) is useful for diagnosis of conditions and  
CC diseases related to the expression of ERG, and as diagnostic tool to  
CC examine genetic drift and mutations within diseased cells or to detect  
CC the presence of ERG RNA in a cell. (I) is useful for specifically  
CC targeting genes that share homology with ERG gene or ERG fusion genes.  
CC ABK17354-ABK22719 represent nucleic acids, including antisense and  
CC enzymatic nucleic acid molecules which regulate expression of ERG, and  
CC related PCR primers of the invention  
XX  
SQ Sequence 17 BP; 1 A; 10 C; 3 G; 0 T; 3 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 556 GCTGAGGCGGCGCGG 572  
DB 17 GCTGAGGAGGACGCGG 1  
RESULT 4445  
ABK17919/c  
ID ABK17919 standard; RNA; 17 BP.

XX AC ABK17919;  
XX DT 09-APR-2002 (first entry)  
XX DE Human ERG hammerhead ribozyme target sequence, Seq ID No 566.  
XX KW Human; hammerhead ribozyme; cytosstatic; antitumour; antidiabetic;  
KW ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;  
KW vulnery; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;  
KW tumour angiogenesis; diabetic retinopathy; macular degeneration;  
KW neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;  
KW angiofibroma of tuberous sclerosis; port-wine stain; wound healing;  
KW Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;  
KW Osler-Weber-rendu syndrome, leukaemia; osteoporosis; DNazyme; inozyme;  
KW amberzyme.  
XX OS Homo sapiens.  
XX PN WO200188124-A2.  
XX PD 22-NOV-2001.  
XX PF 16-MAY-2001; 2001WO-US015866.  
XX PR 16-MAY-2000; 2000US-00572021.  
XX PA (RIBO-) RIBOZYME PHARM INC.  
PA (GLAX ) GLAXO GROUP LTD.  
XX PI Jarvis T, Von Carlowitz I, Mcswiggen JA, McLaughlin F, Randi AM;  
XX WPI; 2002-082995/11.  
XX PT Novel polynucleotide which down regulates expression of Ets-related gene,  
PT useful for treating cancer, diabetic retinopathy, macular degeneration,  
PT arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.  
XX PS Claim 4; Page 69; 149pp; English.  
XX CC The invention relates to a nucleic acid molecule (I) which down regulates  
CC expression of an Ets-related gene (ERG). (I) is useful for treating  
CC conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,  
CC tumour angiogenesis, diabetic retinopathy, macular degeneration,  
CC neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca  
CC vulgaris, angiofibroma of tuberous sclerosis, port-wine stains, Sturge  
CC Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu  
CC syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for  
CC treating a patient having a condition associated with the level of ERG,  
CC by contacting cells of the patient with (I) under conditions suitable for  
CC the treatment. The method comprises the use of one or more therapies  
CC under conditions suitable for the treatment. Leukaemia or tumour  
CC angiogenesis is treated by administering (I) to the patient in  
CC conjunction with one or more of other therapies such as radiation or  
CC chemotherapy treatment. (I) is useful for reducing ERG activity in a  
CC cell, by contacting the cell with (I). (I) is useful for cleaving RNA of  
CC ERG gene, by contacting (I) with RNA, in the presence of a divalent  
CC cation such as Mg2+. (I) is useful for diagnosis of conditions and  
CC diseases related to the expression of ERG, and as diagnostic tool to  
CC examine genetic drift and mutations within diseased cells or to detect  
CC the presence of ERG RNA in a cell. (I) is useful for specifically  
CC targeting genes that share homology with ERG gene or ERG fusion genes.  
CC ABK17354-ABK22719 represent nucleic acids, including antisense and  
CC enzymatic nucleic acid molecules which regulate expression of ERG, and  
CC related PCR primers of the invention  
XX SQ Sequence 17 BP; 2 A; 9 C; 3 G; 0 T; 3 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 557 CTGAGGGCGGCGGT 573

Db 17 CTGGAGGAGGACGGGT 1  
RESULT 4446  
AAD41894/c  
ID AAD41894 standard; DNA; 17 BP.  
XX AC AAD41894;  
XX DT 30-OCT-2002 (first entry)  
XX DE Target DNA #4 used in the exemplification of the invention.  
KW Antisense therapy; infection; cardiovascular disorder; immune reaction;  
KW gene therapy; virucide; cytostatic; antibacterial; antiinflammatory;  
KW cancer; cardiant; ds.  
XX OS Unidentified.  
XX PN US6380368-B1.  
XX PD 30-APR-2002.  
XX PF 12-FEB-1996; 96US-00599738.  
XX PR 26-NOV-1991; 91US-00799824.  
PR 25-AUG-1992; 92US-00935444.  
PR 23-OCT-1992; 92US-00965941.  
PR 25-NOV-1992; 92US-00976103.  
PR 14-NOV-1994; 94US-00338352.  
XX PA (ISIS-) ISIS PHARM INC.  
XX PI Froehler B, Wagner R, Mattencchi M, Jones RJ, Gutierrez AJ;  
PI Pudlo J;  
XX WPI; 2002-535437/57.  
XX PT New oligomers useful for binding to DNA duplex target sequence and for  
PT treating e.g. diseases caused by viruses and inflammatory conditions  
XX comprise at least three 3'-5' linked nucleosides.  
XX PS Example 17; Col 53; 106pp; English.  
XX CC The present invention relates to novel oligomers which have enhanced  
CC ability with respect to forming duplexes or triplexes. The oligomers  
CC comprise at least three 3'-5' linked nucleosides or their salts. At least  
CC one internucleoside linkage is not a phosphodiester linkage and at least  
CC one nucleoside comprises a base. Sequences of the invention are useful  
CC for binding to a DNA duplex target sequence via either CT or GT triplex  
CC helix binding motif and in antisense therapies. They are also used for  
CC treating diseases caused by viruses and for diagnostic applications to  
CC detect viral infections, bacterial infections and diseases such as  
CC cancers. The oligomers are also used as primers, in the treatment of  
CC pathological conditions associated with inflammatory conditions,  
CC cardiovascular disorders, immune reactions and bacterial infections and  
CC for modulating target gene expression. They are also useful in gene  
CC therapy. The present sequence is a target DNA used in the exemplification  
XX of the invention  
SQ Sequence 17 BP; 12 A; 0 C; 5 G; 0 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 2156 TTTTTCCTCCTTTT 2172  
Db 17 TTTTTCCTCCTTTT 1  
RESULT 4447





PA (SHAN/) SHANNON M E.  
XX Gu Y, Shannon ME;  
PI WPI; 2002-697817/75.  
XX  
XX New isolated nucleic acid encoding an isoform of human pregnancy  
PT associated plasma protein E, for preventing or aborting pregnancy.  
PT  
XX Example 2; Page 138; 353pp; English.  
PS  
XX This invention describes a novel isolated nucleic acid that encodes one  
CC of three new isoforms of human pregnancy associated plasma protein E,  
CC hPAPP-E. The products of the invention have abortive and contraceptive  
CC activity and can be used for gene therapy or in a vaccine. The nucleic  
CC acid, polypeptide encoded by it, or antibody to the polypeptide can be  
CC used in pharmaceutical compositions or vaccines for preventing or  
CC aborting pregnancy. PAPP-E is used in the antenatal diagnosis of  
CC dysgenetic pregnancies. The nucleic acids are used as probes to assess  
CC the level of PAPP-E isoform mRNA in chorionic villus samples, and the  
CC antibodies can be used to assess the expression levels of PAPP-E isoform  
CC proteins in chorionic villus samples, to diagnose dysgenetic pregnancies  
CC antenatally. This sequence represents an oligomer used in scanning the  
CC human PAPP-E genes described in the disclosure of the invention  
XX  
SQ Sequence 17 BP; 14 A; 0 C; 3 G; 0 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 2785 GAAAAAAGAAAGAA 2801  
Db ||||| 1 GAAAAAAGAAAGAA 17  
  
RESULT 4450  
ABS76194  
ID ABS76194 standard; DNA; 17 BP.  
XX  
AC ABS76194;  
XX  
DT 27-DEC-2002 (first entry)  
XX  
DE Human PAPP-Eb associated 17-mer SEQ ID 1720.  
XX  
KW PAPP-E; human; pregnancy associated plasma protein E; abortive;  
KW contraceptive; gene therapy; vaccine; pregnancy; antenatal; diagnosis;  
KW dysgenetic pregnancy; primer; ss.  
XX  
OS Homo sapiens.  
XX  
PN US2002102252-A1.  
XX  
PD 01-AUG-2002.  
XX  
PF 06-APR-2001; 2001US-00827998.  
XX  
PR PAPP-E; human; pregnancy associated plasma protein E; abortive;  
PR contraceptive; gene therapy; vaccine; pregnancy; antenatal; diagnosis;  
PR dysgenetic pregnancy; primer; ss.  
XX  
PA (GUY/) GU Y.  
XX (SHAN/) SHANNON M E.  
XX  
PI Gu Y, Shannon ME;  
XX  
DR WPI; 2002-697817/75.  
XX  
PT New isolated nucleic acid encoding an isoform of human pregnancy  
PT associated plasma protein E, for preventing or aborting pregnancy.  
XX  
PS Example 2; Page 301; 353pp; English.  
XX  
CC This invention describes a novel isolated nucleic acid that encodes one

CC of three new isoforms of human pregnancy associated plasma protein E,  
CC hPAPP-E. The products of the invention have abortive and contraceptive  
CC activity and can be used for gene therapy or in a vaccine. The nucleic  
CC acid, polypeptide encoded by it, or antibody to the polypeptide can be  
CC used in pharmaceutical compositions or vaccines for preventing or  
CC aborting pregnancy. PAPP-E is used in the antenatal diagnosis of  
CC dysgenetic pregnancies. The nucleic acids are used as probes to assess  
CC the level of PAPP-E isoform mRNA in chorionic villus samples, and the  
CC antibodies can be used to assess the expression levels of PAPP-E isoform  
CC proteins in chorionic villus samples, to diagnose dysgenetic pregnancies  
CC antenatally. This sequence represents an oligomer used in scanning the  
CC human PAPP-E genes described in the disclosure of the invention  
XX  
SQ Sequence 17 BP; 1 A; 4 C; 5 G; 7 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 2313 CAATTGTGCTGCTTG 2329  
Db ||||| 1 CCAGTTGTGCTGCTTG 17  
  
RESULT 4451  
ABS76191  
ID ABS76191 standard; DNA; 17 BP.  
XX  
AC ABS76191;  
XX  
DT 27-DEC-2002 (first entry)  
XX  
DE Human PAPP-Eb associated 17-mer SEQ ID 1717.  
XX  
KW PAPP-E; human; pregnancy associated plasma protein E; abortive;  
KW contraceptive; gene therapy; vaccine; pregnancy; antenatal; diagnosis;  
KW dysgenetic pregnancy; primer; ss.  
XX  
OS Homo sapiens.  
XX  
PN US2002102252-A1.  
XX  
PD 01-AUG-2002.  
XX  
PF 06-APR-2001; 2001US-00827998.  
XX  
PR 26-MAY-2000; 2000US-0207456P.  
XX  
PA (GUY/) GU Y.  
XX (SHAN/) SHANNON M E.  
XX  
PI Gu Y, Shannon ME;  
XX  
DR WPI; 2002-697817/75.  
XX  
PT New isolated nucleic acid encoding an isoform of human pregnancy  
PT associated plasma protein E, for preventing or aborting pregnancy.  
XX  
PS Example 2; Page 301; 353pp; English.  
XX  
CC This invention describes a novel isolated nucleic acid that encodes one  
CC of three new isoforms of human pregnancy associated plasma protein E,  
CC hPAPP-E. The products of the invention have abortive and contraceptive  
CC activity and can be used for gene therapy or in a vaccine. The nucleic  
CC acid, polypeptide encoded by it, or antibody to the polypeptide can be  
CC used in pharmaceutical compositions or vaccines for preventing or  
CC aborting pregnancy. PAPP-E is used in the antenatal diagnosis of  
CC dysgenetic pregnancies. The nucleic acids are used as probes to assess  
CC the level of PAPP-E isoform mRNA in chorionic villus samples, and the  
CC antibodies can be used to assess the expression levels of PAPP-E isoform  
CC proteins in chorionic villus samples, to diagnose dysgenetic pregnancies  
CC antenatally. This sequence represents an oligomer used in scanning the  
CC human PAPP-E genes described in the disclosure of the invention

XX SQ Sequence 17 BP; 3 A; 4 C; 5 G; 5 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 2310 AAGCAATTGTTGCTGC 2326  
Db 1 AAGCCAGTTGTTGCTGC 17  
RESULT 4452  
ABS76193  
ID ABS76193 standard; DNA; 17 BP.  
XX AC ABS76193;  
XX DT 27-DEC-2002 (first entry)  
XX DE Human PAPP-Eb associated 17-mer SEQ ID 1719.  
XX KW PAPP-E; human; pregnancy associated plasma protein E; abortive;  
KW contraceptive; gene therapy; vaccine; pregnancy; antenatal; diagnosis;  
KW dysgenetic pregnancy; primer; ss.  
XX OS Homo sapiens.  
XX PN US2002102252-A1.  
XX PD 01-AUG-2002.  
XX PF 06-APR-2001; 2001US-00827998.  
XX PR 26-MAY-2000; 2000US-0207456P.  
XX PA (GUY/) GU Y.  
XX PI (SHAN/) SHANNON M E.  
XX PI Gu Y, Shannon ME;  
XX WPI; 2002-697817/75.  
XX PD 01-AUG-2002.  
XX PF 06-APR-2001; 2001US-00827998.  
XX PR 26-MAY-2000; 2000US-0207456P.  
XX PA (GUY/) GU Y.  
XX PI (SHAN/) SHANNON M E.  
XX PI Gu Y, Shannon ME;  
XX WPI; 2002-697817/75.  
XX New isolated nucleic acid encoding an isoform of human pregnancy associated plasma protein E, for preventing or aborting pregnancy.  
XX Example 2; Page 301; 353pp; English.  
XX This invention describes a novel isolated nucleic acid that encodes one of three new isoforms of human pregnancy associated plasma protein E, hpAPP-E. The products of the invention have abortive and contraceptive activity and can be used for gene therapy or in a vaccine. The nucleic acid, polypeptide encoded by it, or antibody to the polypeptide can be used in pharmaceutical compositions or vaccines for preventing or aborting pregnancy. PAPP-E is used in the antenatal diagnosis of dysgenetic pregnancies. The nucleic acids are used as probes to assess the level of PAPP-E isoform mRNA in chorionic villus samples, and the antibodies can be used to assess the expression levels of PAPP-E isoform proteins in chorionic villus samples, to diagnose dysgenetic pregnancies antenatally. This sequence represents an oligomer used in scanning the human PAPP-E genes described in the disclosure of the invention  
XX SQ Sequence 17 BP; 1 A; 4 C; 5 G; 7 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 2312 GCAATTGTTGCTGCTT 2328  
Db 1 GCCAGTTGTTGCTGCTT 17

RESULT 4453  
ABS74686/C  
ID ABS74686 standard; DNA; 17 BP.  
XX AC ABS74686;  
XX DT 24-DEC-2002 (first entry)  
XX DE Human PAPP-Ea associated 17-mer SEQ ID 212.  
XX KW PAPP-E; human; pregnancy associated plasma protein E; abortive;  
KW contraceptive; gene therapy; vaccine; pregnancy; antenatal; diagnosis;  
KW dysgenetic pregnancy; primer; ss.  
XX OS Homo sapiens.  
XX PN US2002102252-A1.  
XX PD 01-AUG-2002.  
XX PF 06-APR-2001; 2001US-00827998.  
XX PR 26-MAY-2000; 2000US-0207456P.  
XX PA (GUY/) GU Y.  
XX PI (SHAN/) SHANNON M E.  
XX PI Gu Y, Shannon ME;  
XX WPI; 2002-697817/75.  
XX New isolated nucleic acid encoding an isoform of human pregnancy associated plasma protein E, for preventing or aborting pregnancy.  
XX Example 2; Page 103; 353pp; English.  
XX This invention describes a novel isolated nucleic acid that encodes one of three new isoforms of human pregnancy associated plasma protein E, hpAPP-E. The products of the invention have abortive and contraceptive activity and can be used for gene therapy or in a vaccine. The nucleic acid, polypeptide encoded by it, or antibody to the polypeptide can be used in pharmaceutical compositions or vaccines for preventing or aborting pregnancy. PAPP-E is used in the antenatal diagnosis of dysgenetic pregnancies. The nucleic acids are used as probes to assess the level of PAPP-E isoform mRNA in chorionic villus samples, and the antibodies can be used to assess the expression levels of PAPP-E isoform proteins in chorionic villus samples, to diagnose dysgenetic pregnancies antenatally. This sequence represents an oligomer used in scanning the human PAPP-E genes described in the disclosure of the invention  
XX SQ Sequence 17 BP; 8 A; 3 C; 3 G; 3 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 2312 GCAATTGTTGCTGCTT 2328  
Db 17 GCAATTGATGCTTCTT 1  
RESULT 4454  
ABS76192  
ID ABS76192 standard; DNA; 17 BP.  
XX AC ABS76192;  
XX DT 27-DEC-2002 (first entry)  
XX DE Human PAPP-Eb associated 17-mer SEQ ID 1718.  
XX KW PAPP-E; human; pregnancy associated plasma protein E; abortive;  
KW contraceptive; gene therapy; vaccine; pregnancy; antenatal; diagnosis;



KW dysgenetic pregnancy; primer; ss.  
XX Homo sapiens.  
OS US2002102252-A1.  
XX 01-AUG-2002.  
XX 06-APR-2001; 2001US-00827998.  
XX 26-MAY-2000; 2000US-0207456P.  
XX (GUY/ ) GU Y.  
PA (SHAN/ ) SHANNON M E.  
XX Gu Y, Shannon ME;  
PI WPI; 2002-697817/75.  
XX New isolated nucleic acid encoding an isoform of human pregnancy associated plasma protein E, for preventing or aborting pregnancy.  
PT Example 2; Page 301; 353pp; English.  
PT This invention describes a novel isolated nucleic acid that encodes one of three new isoforms of human pregnancy associated plasma protein E, hPAPP-E. The products of the invention have abortive and contraceptive activity and can be used for gene therapy or in a vaccine. The nucleic acid, polypeptide encoded by it, or antibody to the polypeptide can be used in pharmaceutical compositions or vaccines for preventing or aborting pregnancy. PAPP-E is used in the antenatal diagnosis of dysgenetic pregnancies. The nucleic acids are used as probes to assess the level of PAPP-E isoform mRNA in chorionic villus samples, and the antibodies can be used to assess the expression levels of PAPP-E isoform proteins in chorionic villus samples, to diagnose dysgenetic pregnancies antenatally. This sequence represents an oligomer used in scanning the human PAPP-E genes described in the disclosure of the invention

XX  
SQ Sequence 17 BP; 2 A; 4 C; 5 G; 6 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2311 AGCAATTGTTGCTGCT 2327  
Db 1 AGCCAGTTGTTGCTGCT 17  
RESULT 4455  
ABL31395  
ID ABL31395 standard; DNA; 17 BP.  
XX ABL31395;  
AC ABL31395;  
XX 21-MAR-2002 (first entry)  
XX Human HLA genotyping oligonucleotide SEQ ID NO 884.  
DE Human; human leukocyte antigen; HLA; genotype; polymorphism;  
XX immunogenetic; transplantation; genetic disease; ss.  
OS Homo sapiens.  
XX WO200192572-A1.  
PN 06-DEC-2001.  
XX 01-JUN-2001; 2001WO-JP004662.  
XX 01-JUN-2000; 2000JP-00164798.  
XX (NLSN ) NISSHINBO IND INC.

PA (SYST-) SYSTEM RES INC.  
XX Inoko H, Kagiya T, Ichihara T, Matsumura Y, Moriya S, Nishida M;  
PI WPI; 2002-122074/16.  
XX Human leukocyte antigen (HLA) typing, useful for judging HLA genotypes of individuals e.g. by determining immunogenetic differences when transplanting between them.  
PT Claim 10; Page 261; 345pp; Japanese.  
XX The invention relates to a typing kit for judging human leukocyte antigen (HLA) genotype of a sample by hybridising a substrate on which 10-24 base oligonucleotides (ABL30512-ABL31809) originating in the sequences of genes e.g. belonging to HLA class I antigens on human genome and containing gene polymorphisms as alloantigens have been immobilised as primers for amplification of cleaved nucleic acids relating to gene polymorphisms. The method is useful for judging HLA genotypes of individuals by determining immunogenetic differences before transplanting between them, providing genetic information to decide compatibility of organ and tissue for transplantation e.g. of bone marrow, kidney, liver, pancreas, langerhans islet in pancreas and cornea, susceptibility diagnosis of genetic diseases and identifying individuals

XX  
SQ Sequence 17 BP; 7 A; 2 C; 7 G; 1 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1004 GAGAAGTTGGACAAGAT 1020  
Db 1 GAGAAGCGGGACAAGAT 17  
RESULT 4456  
ABL31540/c  
ID ABL31540 standard; DNA; 17 BP.  
XX ABL31540;  
AC ABL31540;  
XX 21-MAR-2002 (first entry)  
XX Human HLA genotyping oligonucleotide SEQ ID NO 1029.  
DE Human; human leukocyte antigen; HLA; genotype; polymorphism;  
XX immunogenetic; transplantation; genetic disease; ss.  
OS Homo sapiens.  
XX WO200192572-A1.  
PN 06-DEC-2001.  
XX 01-JUN-2001; 2001WO-JP004662.  
XX 01-JUN-2000; 2000JP-00164798.  
XX (NLSN ) NISSHINBO IND INC.  
PA (SYST-) SYSTEM RES INC.  
XX Inoko H, Kagiya T, Ichihara T, Matsumura Y, Moriya S, Nishida M;  
PI WPI; 2002-122074/16.  
XX Human leukocyte antigen (HLA) typing, useful for judging HLA genotypes of individuals e.g. by determining immunogenetic differences when transplanting between them.  
PT Claim 10; Page 288; 345pp; Japanese.  
XX The invention relates to a typing kit for judging human leukocyte antigen

CC (HLA) genotype of a sample by hybridising a substrate on which 10-24 base  
CC oligonucleotides (ABL30512-ABL31809) originating in the sequences of  
CC genes e.g. belonging to HLA class I antigens on human genome and  
CC containing gene polymorphisms as alloantigens have been immobilised as  
CC primers for amplification of cleaved nucleic acids relating to gene  
CC polymorphisms. The method is useful for judging HLA genotypes of  
CC individuals by determining immunogenetic differences before transplanting  
CC between them, providing genetic information to decide compatibility of  
CC organ and tissue for transplantation e.g. of bone marrow, kidney, liver,  
CC pancreas, Langerhans islet in pancreas and cornea, susceptibility  
CC diagnosis of genetic diseases and identifying individuals  
XX  
SQ Sequence 17 BP; 4 A; 6 C; 6 G; 1 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1376 GCCATCTGTGCCGGGT 1392  
||| | | | | | | | |  
Db 17 GCCATGTCTGCCGGGT 1

RESULT 4457  
ABL31783/c  
ID ABL31783 standard; DNA; 17 BP.  
XX  
AC ABL31783;  
XX  
DT 21-MAR-2002 (first entry)  
XX  
DE Human HLA genotyping oligonucleotide SEQ ID NO 1272.  
XX  
KW Human; human leukocyte antigen; HLA; genotype; polymorphism;  
KW immunogenetic; transplantation; genetic disease; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO200192572-A1.  
XX  
PD 06-DEC-2001.  
XX  
PF 01-JUN-2001; 2001WO-JP004662.  
XX  
PR 01-JUN-2000; 2000JP-00164798.  
XX  
PA (NISON) NISSHINBO IND INC.  
PA (SYST-) SYSTEM RES INC.  
XX  
PI Inoko H, Kagiya T, Ichihara T, Matsumura Y, Moriya S, Nishida M;  
XX  
DR WPI; 2002-122074/16.

XX  
PT Human leukocyte antigen (HLA) typing, useful for judging HLA genotypes of  
PT individuals e.g. by determining immunogenetic differences when  
PT transplanting between them.

XX  
PS Claim 10; Page 334; 345pp; Japanese.

XX  
CC The invention relates to a typing kit for judging human leukocyte antigen  
CC (HLA) genotype of a sample by hybridising a substrate on which 10-24 base  
CC oligonucleotides (ABL30512-ABL31809) originating in the sequences of  
CC genes e.g. belonging to HLA class I antigens on human genome and  
CC containing gene polymorphisms as alloantigens have been immobilised as  
CC primers for amplification of cleaved nucleic acids relating to gene  
CC polymorphisms. The method is useful for judging HLA genotypes of  
CC individuals by determining immunogenetic differences before transplanting  
CC between them, providing genetic information to decide compatibility of  
CC organ and tissue for transplantation e.g. of bone marrow, kidney, liver,  
CC pancreas, Langerhans islet in pancreas and cornea, susceptibility  
CC diagnosis of genetic diseases and identifying individuals  
XX

SQ Sequence 17 BP; 3 A; 7 C; 6 G; 1 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1382 TGTGCCCGCGGTCTGTC 1398  
||| | | | | | | | |  
Db 17 TGAGCCCGCGGTGTCGC 1

RESULT 4458  
ACC52674/c  
ID ACC52674 standard; DNA; 17 BP.  
XX

AC ACC52674;  
XX  
DT 27-JUN-2003 (first entry)  
XX

DE Human tumour suppressor sequence #1441.

XX ss; tumour suppressor; antitumour; cytostatic; tumour suppression;  
KW tumour regression; apoptosis; virus resistance; diagnosis;  
KW cellular degeneration.

XX Homo sapiens.

XX FR2826373-A1.

PD 27-DEC-2002.

XX 20-JUN-2001; 2001FR-00008139.

XX 20-JUN-2001; 2001FR-00008139.

PA (MOLE-) MOLECULAR ENGINES LAB SA.

XX Tuijnder M, Telerman A, Anson R;

XX WPI; 2003-250498/25.

XX New nucleic acid sequences associated with tumor suppression, regression,  
PT apoptosis or virus resistance are useful to diagnose and treat viral  
PT disease, development of tumor cells and cell degeneration.

XX Claim 1; Page 373; 798pp; French.

XX This sequence represents an isolated nucleic acid sequence associated  
CC with tumour suppression or regression, apoptosis or virus resistance. The  
CC invention relates to these sequences or sequences having at least 80%  
CC identity to them, and polypeptides encoded by the sequences or  
CC polypeptides having 80% identity to the polypeptide sequences. The  
CC invention is used to diagnose or treat viral disease or disease  
CC characterized by development of tumour cells or cellular degeneration  
XX

SQ Sequence 17 BP; 6 A; 5 C; 1 G; 5 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2447 TTTTGAGACATGGGATC 2463  
||| | | | | | | | |  
Db 17 TTTTAAGAGATGGGATC 1

RESULT 4459  
ACC52259/c  
ID ACC52259 standard; DNA; 17 BP.

XX ACC52259;

XX 27-JUN-2003 (first entry)

XX





CC This sequence represents an oligonucleotide used to analyse the gene  
CC encoding human G-protein coupled receptor GPCR-A-1  
XX  
SQ Sequence 17 BP; 2 A; 4 C; 5 G; 6 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 2108 GGCCTTCTGGTTTAGG 2124  
Db 1 GACCTTCTGGTCTTAGG 17  
  
RESULT 4462  
ACA99704  
ID ACA99704 standard; DNA; 17 BP.  
XX  
AC ACA99704;  
XX  
DT 28-JUL-2003 (first entry)  
XX  
DE G-protein coupled receptor GPCR-A-1 analysis oligonucleotide #197.  
XX  
KW Human; G-protein coupled receptor; GPCR-A-1; cancer; tumour;  
KW G-Protein-Agonist; G-Protein-Antagonist; gene therapy; cytostatic; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO2003031621-A2.  
XX  
PD 17-APR-2003.  
XX  
PF 11-OCT-2002; 2002WO-US032599.  
XX  
PR 12-OCT-2001; 2001US-0329000P.  
XX  
PA (AMSH ) AMERSHAM BIOSCIENCES SV CORP.  
XX  
PI Zhang J;  
XX  
DR WPI; 2003-381720/36.  
XX  
PT New GPCR-A-1 nucleic acid and polypeptide, useful for diagnosing,  
PT investigating and/or treating disorders associated with aberrant  
PT expression or activity of GPCR-A-1, such as tumors and cancers.  
XX  
PS Example 2; SEQ ID NO 221; 156pp; English.  
XX  
CC The invention describes an isolated nucleic acid encoding a G protein  
CC coupled receptor (GPCR), mutations of which cause cancer, comprising a  
CC 2225 or 1921 base pair sequence, or their degenerate variants, encoding a  
CC 409 residue amino acid sequence, all given in the specification, with or  
CC without conservative amino acid substitutions, or complements of the  
CC sequence of them. The encoding nucleic acid is not more than 100 kb in  
CC length. The methods and compositions of the present invention are useful  
CC for diagnosing, investigating and/or treating disorders associated with  
CC aberrant expression or activity of GPCR-A-1, such as tumors and cancers.  
CC This sequence represents an oligonucleotide used to analyse the gene  
CC encoding human G-protein coupled receptor GPCR-A-1  
XX  
SQ Sequence 17 BP; 2 A; 4 C; 5 G; 6 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 2106 GGGGCCTTCTGGTTTA 2122  
Db 1 GGGACCTTCTGGTCTTA 17  
  
RESULT 4463

ACA99703  
ID ACA99703 standard; DNA; 17 BP.  
XX  
AC ACA99703;  
XX  
DT 28-JUL-2003 (first entry)  
XX  
DE G-protein coupled receptor GPCR-A-1 analysis oligonucleotide #196.  
XX  
KW Human; G-protein coupled receptor; GPCR-A-1; cancer; tumour;  
KW G-Protein-Agonist; G-Protein-Antagonist; gene therapy; cytostatic; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO2003031621-A2.  
XX  
PD 17-APR-2003.  
XX  
PF 11-OCT-2002; 2002WO-US032599.  
XX  
PR 12-OCT-2001; 2001US-0329000P.  
XX  
PA (AMSH ) AMERSHAM BIOSCIENCES SV CORP.  
XX  
PI Zhang J;  
XX  
DR WPI; 2003-381720/36.  
XX  
PT New GPCR-A-1 nucleic acid and polypeptide, useful for diagnosing,  
PT investigating and/or treating disorders associated with aberrant  
PT expression or activity of GPCR-A-1, such as tumors and cancers.  
XX  
PS Example 2; SEQ ID NO 220; 156pp; English.  
XX  
CC The invention describes an isolated nucleic acid encoding a G protein  
CC coupled receptor (GPCR), mutations of which cause cancer, comprising a  
CC 2225 or 1921 base pair sequence, or their degenerate variants, encoding a  
CC 409 residue amino acid sequence, all given in the specification, with or  
CC without conservative amino acid substitutions, or complements of the  
CC sequence of them. The encoding nucleic acid is not more than 100 kb in  
CC length. The methods and compositions of the present invention are useful  
CC for diagnosing, investigating and/or treating disorders associated with  
CC aberrant expression or activity of GPCR-A-1, such as tumors and cancers.  
CC This sequence represents an oligonucleotide used to analyse the gene  
CC encoding human G-protein coupled receptor GPCR-A-1  
XX  
SQ Sequence 17 BP; 1 A; 4 C; 6 G; 6 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 2105 GGGGCCTTCTGGTTT 2121  
Db 1 GGGACCTTCTGGTCTT 17  
  
RESULT 4464  
ACA99705  
ID ACA99705 standard; DNA; 17 BP.  
XX  
AC ACA99705;  
XX  
DT 28-JUL-2003 (first entry)  
XX  
DE G-protein coupled receptor GPCR-A-1 analysis oligonucleotide #198.  
XX  
KW Human; G-protein coupled receptor; GPCR-A-1; cancer; tumour;  
KW G-Protein-Agonist; G-Protein-Antagonist; gene therapy; cytostatic; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO2003031621-A2.

XX 17-APR-2003.  
XX 11-OCT-2002; 2002WO-US032599.  
XX 12-OCT-2001; 2001US-0329000P.  
XX (AMSH ) AMERSHAM BIOSCIENCES SV CORP.  
XX Zhang J;  
XX WPI; 2003-381720/36.  
XX New GPCR-A-1 nucleic acid and polypeptide, useful for diagnosing,  
PT investigating and/or treating disorders associated with aberrant  
PT expression or activity of GPCR-A-1, such as tumors and cancers.  
XX Example 2; SEQ ID NO 222; 156pp; English.  
XX The invention describes an isolated nucleic acid encoding a G protein  
CC coupled receptor (GPCR), mutations of which cause cancer, comprising a  
CC 2225 or 1921 base pair sequence, or their degenerate variants, encoding a  
CC 409 residue amino acid sequence, all given in the specification, with or  
CC without conservative amino acid substitutions, or complements of the  
CC sequence of them. The encoding nucleic acid is not more than 100 kbase in  
CC length. The methods and compositions of the present invention are useful  
CC for diagnosing, investigating and/or treating disorders associated with  
CC aberrant expression or activity of GPCR-A-1, such as tumours and cancers.  
CC This sequence represents an oligonucleotide used to analyse the gene  
CC encoding human G-protein coupled receptor GPCR-A-1.  
XX Sequence 17 BP; 2 A; 4 C; 5 G; 6 T; 0 U; 0 Other;  
SQ Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 2107 GGGCCTTCTGGTTTGTAG 2123  
Db |||||  
1 GGACCTTCTGGTCTTAG 17  
RESULT 4465  
ABT35213/c  
ID ABT35213 standard; DNA; 17 BP.  
XX ABT35213;  
AC ABT35213;  
XX 12-JUN-2003 (first entry)  
DT Tumour suppression related human fukutin oligo SEQ ID No 850.  
XX Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;  
KW antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;  
KW schizophrenia; protein chip; gene therapy; tumour suppression;  
KW human fukutin; ds.  
XX Homo sapiens.  
OS WO2003025175-A2.  
XX 27-MAR-2003.  
PD 17-SEP-2002; 2002WO-IB004208.  
XX 17-SEP-2001; 2001FR-00011978.  
PR (MOLE-) MOLECULAR ENGINES LAB.  
XX Telerman A, Amson R, Tuijnder M;  
PI WPI; 2003-313353/30.  
XX New isolated nucleic acid, useful for treating viral diseases associated  
PT with tumors and cell degeneration, also related polypeptides, antibodies

PT New isolated nucleic acid, useful for treating viral diseases associated  
PT with tumors and cell degeneration, also related polypeptides, antibodies  
PT and transfected cells.  
XX Disclosure; Page 132; 720pp; French.  
XX The invention relates to a novel isolated 17 mer nucleic acid sequence,  
CC given in the specification, a sequence containing at least 15 consecutive  
CC nucleotides from the 17 mer sequence, a sequence with, after optimal  
CC alignment, at least 80 % identity to the 17 mer sequence, a sequence that  
CC hybridizes to them under highly stringent conditions, or the complement  
CC of any of them, or the corresponding RNA. The novel isolated nucleic  
CC acids of the invention are useful as probes and primers for detecting,  
CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one  
CC component of a gene chip, in vitro as (anti)sense reagents, and for  
CC production of recombinant polypeptides. Any of the nucleic acids,  
CC polypeptides, vectors containing the nucleic acids, cells containing the  
CC vector or antibodies directed against the polypeptides are useful for  
CC preparation of pharmaceuticals for prevention and/or treatment of viral  
CC diseases that are characterised by development of tumours or cell  
CC degeneration, specifically cancer but also Alzheimer's disease and  
CC schizophrenia. Analysis of the expression of the 17 mer nucleic acids in  
CC patient samples is useful for diagnosis and/or prognosis of these  
CC diseases. The polypeptides can also be used to generate antibodies, and  
CC both the polypeptide and antibodies are useful as components of protein  
CC chips. The nucleic acid sequences of the invention can be used in gene  
CC therapy. This polynucleotide sequence represents a tumour suppression  
CC related human fukutin oligonucleotide of the invention  
XX Sequence 17 BP; 4 A; 1 C; 4 G; 8 T; 0 U; 0 Other;  
SQ Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1437 ACAAATCCTACATGAAC 1453  
Db |||||  
17 ACAAATACTACATGATC 1  
RESULT 4466  
ABT35699/c  
ID ABT35699 standard; DNA; 17 BP.  
XX ABT35699;  
AC ABT35699;  
XX 12-JUN-2003 (first entry)  
DT Tumour suppression related human fukutin oligo SEQ ID No 1336.  
XX Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;  
KW antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;  
KW schizophrenia; protein chip; gene therapy; tumour suppression;  
KW human fukutin; ds.  
XX Homo sapiens.  
OS WO2003025175-A2.  
XX 27-MAR-2003.  
PD 17-SEP-2002; 2002WO-IB004208.  
XX 17-SEP-2001; 2001FR-00011978.  
PR (MOLE-) MOLECULAR ENGINES LAB.  
XX Telerman A, Amson R, Tuijnder M;  
PI WPI; 2003-313353/30.  
XX New isolated nucleic acid, useful for treating viral diseases associated  
PT with tumors and cell degeneration, also related polypeptides, antibodies

PT and transfected cells.  
XX  
PS Disclosure; Page 189; 720pp; French.  
XX  
CC The invention relates to a novel isolated 17 mer nucleic acid sequence,  
CC given in the specification, a sequence containing at least 15 consecutive  
CC nucleotides from the 17 mer sequence, a sequence with, after optimal  
CC alignment, at least 80 % identity to the 17 mer sequence, or the complement  
CC hybridizes to them under highly stringent conditions, or the complement  
CC of any of them, or the corresponding RNA. The novel isolated nucleic  
CC acids of the invention are useful as probes and primers for detecting,  
CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one  
CC component of a gene chip, in vitro as (anti)sense reagents, and for  
CC production of recombinant polypeptides. Any of the nucleic acids,  
CC polypeptides, vectors containing the nucleic acids, cells containing the  
CC vector or antibodies directed against the polypeptides are useful for  
CC preparation of pharmaceuticals for prevention and/or treatment of viral  
CC diseases that are characterised by development of tumours or cell  
CC degeneration, specifically cancer but also Alzheimer's disease and  
CC schizophrenia. Analysis of the expression of the 17 mer nucleic acids in  
CC patient samples is useful for diagnosis and/or prognosis of these  
CC diseases. The polypeptides can also be used to generate antibodies, and  
CC both the polypeptide and antibodies are useful as components of protein  
CC chips. The nucleic acid sequences of the invention can be used in gene  
CC therapy. This polynucleotide sequence represents a tumour suppression  
CC related human fukutin oligonucleotide of the invention  
XX  
SQ Sequence 17 BP; 3 A; 6 C; 4 G; 4 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 202 AGAGGACTGCGAGGATC 218  
Db 17 AGAGGACTGCTCGGATC 1  
  
RESULT 4467  
ABT39123/c  
ID ABT39123 standard; DNA; 17 BP.  
XX  
AC ABT39123;  
XX  
DT 12-JUN-2003 (first entry)  
XX  
DE Tumour suppression related human fukutin oligo SEQ ID No 4760.  
XX  
KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;  
KW antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;  
KW schizophrenia; protein chip; gene therapy; tumour suppression;  
KW human fukutin; ds.  
XX  
OS Homo sapiens.  
XX  
PN WO2003025175-A2.  
XX  
PD 27-MAR-2003.  
XX  
PF 17-SEP-2002; 2002WO-IB004208.  
XX  
PR 17-SEP-2001; 2001FR-00011978.  
XX  
PA (MOLE-) MOLECULAR ENGINES LAB.  
XX  
PI Telerman A, Amson R, Tuijnder M;  
XX  
DR WPI; 2003-313353/30.  
XX  
PT New isolated nucleic acid, useful for treating viral diseases associated  
PT with tumors and cell degeneration, also related polypeptides, antibodies  
PT and transfected cells.  
XX

PS Disclosure; Page 590; 720pp; French.  
XX  
CC The invention relates to a novel isolated 17 mer nucleic acid sequence,  
CC given in the specification, a sequence containing at least 15 consecutive  
CC nucleotides from the 17 mer sequence, a sequence with, after optimal  
CC alignment, at least 80 % identity to the 17 mer sequence, or the complement  
CC hybridizes to them under highly stringent conditions, or the complement  
CC of any of them, or the corresponding RNA. The novel isolated nucleic  
CC acids of the invention are useful as probes and primers for detecting,  
CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one  
CC component of a gene chip, in vitro as (anti)sense reagents, and for  
CC production of recombinant polypeptides. Any of the nucleic acids,  
CC polypeptides, vectors containing the nucleic acids, cells containing the  
CC vector or antibodies directed against the polypeptides are useful for  
CC preparation of pharmaceuticals for prevention and/or treatment of viral  
CC diseases that are characterised by development of tumours or cell  
CC degeneration, specifically cancer but also Alzheimer's disease and  
CC schizophrenia. Analysis of the expression of the 17 mer nucleic acids in  
CC patient samples is useful for diagnosis and/or prognosis of these  
CC diseases. The polypeptides can also be used to generate antibodies, and  
CC both the polypeptide and antibodies are useful as components of protein  
CC chips. The nucleic acid sequences of the invention can be used in gene  
CC therapy. This polynucleotide sequence represents a tumour suppression  
CC related human fukutin oligonucleotide of the invention  
XX  
SQ Sequence 17 BP; 6 A; 5 C; 1 G; 5 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 2447 TTTTGAGACATGGGATC 2463  
Db 17 TTTTAAGAGATGGGATC 1  
  
RESULT 4468  
ABT39231  
ID ABT39231 standard; DNA; 17 BP.  
XX  
AC ABT39231;  
XX  
DT 12-JUN-2003 (first entry)  
XX  
DE Tumour suppression related human fukutin oligo SEQ ID No 4868.  
XX  
KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;  
KW antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;  
KW schizophrenia; protein chip; gene therapy; tumour suppression;  
KW human fukutin; ds.  
XX  
OS Homo sapiens.  
XX  
PN WO2003025175-A2.  
XX  
PD 27-MAR-2003.  
XX  
PF 17-SEP-2002; 2002WO-IB004208.  
XX  
PR 17-SEP-2001; 2001FR-00011978.  
XX  
PA (MOLE-) MOLECULAR ENGINES LAB.  
XX  
PI Telerman A, Amson R, Tuijnder M;  
XX  
DR WPI; 2003-313353/30.  
XX  
PT New isolated nucleic acid, useful for treating viral diseases associated  
PT with tumors and cell degeneration, also related polypeptides, antibodies  
PT and transfected cells.  
XX  
PS Disclosure; Page 603; 720pp; French.  
XX



CC The invention relates to a novel isolated 17 mer nucleic acid sequence,  
CC given in the specification, a sequence containing at least 15 consecutive  
CC nucleotides from the 17 mer sequence, a sequence with, after optimal  
CC alignment, at least 80 % identity to the 17 mer sequence, or the complement  
CC hybridizes to them under highly stringent conditions, a sequence that  
CC of any of them, or the corresponding RNA. The novel isolated nucleic  
CC acids of the invention are useful as probes and primers for detecting,  
CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one  
CC component of a gene chip, in vitro as (anti)sense reagents, and for  
CC production of recombinant polypeptides. Any of the nucleic acids,  
CC polypeptides, vectors containing the nucleic acids, cells containing the  
CC vector or antibodies directed against the polypeptides are useful for  
CC preparation of pharmaceuticals for prevention and/or treatment of viral  
CC diseases that are characterised by development of tumours or cell  
CC degeneration, specifically cancer but also Alzheimer's disease and  
CC schizophrenia. Analysis of the expression of the 17 mer nucleic acids in  
CC patient samples is useful for diagnosis and/or prognosis of these  
CC diseases. The polypeptides can also be used to generate antibodies, and  
CC both the polypeptide and antibodies are useful as components of protein  
CC chips. The nucleic acid sequences of the invention can be used in gene  
CC therapy. This polynucleotide sequence represents a tumour suppression  
CC related human fukutin oligonucleotide of the invention  
XX

SQ Sequence 17 BP; 7 A; 2 C; 2 G; 6 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2460 GATCCAATTTTAATATT 2476  
Db 1 GATCCAAGTTTAAATT 17

RESULT 4469

ABT40168  
ID ABT40168 standard; DNA; 17 BP.

XX AC ABT40168;

XX DT 13-JUN-2003 (first entry)

XX DE Tumour suppression related human fukutin oligo SEQ ID No 5805.

XX KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;  
KW antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;  
KW schizophrenia; protein chip; gene therapy; tumour suppression;  
KW human fukutin; ds.

XX OS Homo sapiens.

XX PN WO2003025175-A2.

XX PD 27-MAR-2003.

XX PF 17-SEP-2002; 2002WO-IB004208.

XX PR 17-SEP-2001; 2001FR-00011978.

XX PA (MOLE-) MOLECULAR ENGINES LAB.

XX PI Telerman A, Amson R, Tuijnder M;

XX DR WPI; 2003-313353/30.

XX PT New isolated nucleic acid, useful for treating viral diseases associated  
PT with tumors and cell degeneration, also related polypeptides, antibodies  
PT and transfected cells.

XX PS Disclosure; Page 712; 720pp; French.

XX CC The invention relates to a novel isolated 17 mer nucleic acid sequence,  
CC given in the specification, a sequence containing at least 15 consecutive

CC nucleotides from the 17 mer sequence, a sequence with, after optimal  
CC alignment, at least 80 % identity to the 17 mer sequence, a sequence that  
CC hybridizes to them under highly stringent conditions, or the complement  
CC of any of them, or the corresponding RNA. The novel isolated nucleic  
CC acids of the invention are useful as probes and primers for detecting,  
CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one  
CC component of a gene chip, in vitro as (anti)sense reagents, and for  
CC production of recombinant polypeptides. Any of the nucleic acids,  
CC polypeptides, vectors containing the nucleic acids, cells containing the  
CC vector or antibodies directed against the polypeptides are useful for  
CC preparation of pharmaceuticals for prevention and/or treatment of viral  
CC diseases that are characterised by development of tumours or cell  
CC degeneration, specifically cancer but also Alzheimer's disease and  
CC schizophrenia. Analysis of the expression of the 17 mer nucleic acids in  
CC patient samples is useful for diagnosis and/or prognosis of these  
CC diseases. The polypeptides can also be used to generate antibodies, and  
CC both the polypeptide and antibodies are useful as components of protein  
CC chips. The nucleic acid sequences of the invention can be used in gene  
CC therapy. This polynucleotide sequence represents a tumour suppression  
CC related human fukutin oligonucleotide of the invention  
XX

SQ Sequence 17 BP; 5 A; 3 C; 1 G; 8 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2460 GATCCAATTTTAATATT 2476  
Db 1 GATCCATCTTTAATATT 17

RESULT 4470

ABT40201  
ID ABT40201 standard; DNA; 17 BP.

XX AC ABT40201;

XX DT 13-JUN-2003 (first entry)

XX DE Tumour suppression related human fukutin oligo SEQ ID No 5838.

XX KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;  
KW antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;  
KW schizophrenia; protein chip; gene therapy; tumour suppression;  
KW human fukutin; ds.

XX OS Homo sapiens.

XX PN WO2003025175-A2.

XX PD 27-MAR-2003.

XX PF 17-SEP-2002; 2002WO-IB004208.

XX PR 17-SEP-2001; 2001FR-00011978.

XX PA (MOLE-) MOLECULAR ENGINES LAB.

XX PI Telerman A, Amson R, Tuijnder M;

XX DR WPI; 2003-313353/30.

XX PT New isolated nucleic acid, useful for treating viral diseases associated  
PT with tumors and cell degeneration, also related polypeptides, antibodies  
PT and transfected cells.

XX PS Disclosure; Page 716; 720pp; French.

XX CC The invention relates to a novel isolated 17 mer nucleic acid sequence,  
CC given in the specification, a sequence containing at least 15 consecutive  
CC nucleotides from the 17 mer sequence, a sequence with, after optimal  
CC alignment, at least 80 % identity to the 17 mer sequence, a sequence that

CC hybridizes to them under highly stringent conditions, or the complement  
CC of any of them, or the corresponding RNA. The novel isolated nucleic  
CC acids of the invention are useful as probes and primers for detecting,  
CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one  
CC component of a gene chip, in vitro as (anti)sense reagents, and for  
CC production of recombinant polypeptides. Any of the nucleic acids,  
CC polypeptides, vectors containing the nucleic acids, cells containing the  
CC vector or antibodies directed against the polypeptides are useful for  
CC preparation of pharmaceuticals for prevention and/or treatment of viral  
CC diseases that are characterised by development of tumours or cell  
CC degeneration, specifically cancer but also Alzheimer's disease and  
CC schizophrenia. Analysis of the expression of the 17 mer nucleic acids in  
CC patient samples is useful for diagnosis and/or prognosis of these  
CC diseases. The polypeptides can also be used to generate antibodies, and  
CC both the polypeptide and antibodies are useful as components of protein  
CC chips. The nucleic acid sequences of the invention can be used in gene  
CC therapy. This polynucleotide sequence represents a tumour suppression  
CC related human fukutin oligonucleotide of the invention  
XX  
SQ Sequence 17 BP; 4 A; 5 C; 4 G; 4 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1256 GAACTTCTCAGCCAGA 1272  
Db 1 GATCTTCTCAGCCAGGA 17  
RESULT 4471  
ADA99204  
ID ADA99204 standard; DNA; 17 BP.  
XX  
AC ADA99204;  
XX  
DT 20-NOV-2003 (first entry)  
XX  
DE Human MDZ3 scanning oligonucleotide SEQ ID 193.  
XX  
KW Cytostatic; immunostimulant; gene therapy; vaccine; human;  
KW zinc finger protein; MDZ3; MDZ4; MDZ7; MDZ12; chromosome 7q22.1;  
KW chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;  
KW developmental disorder; ss.  
XX  
OS Homo sapiens.  
XX  
PN EP1281758-A2.  
XX  
PD 05-FEB-2003.  
XX  
PF 30-JUL-2002; 2002EP-00016874.  
XX  
PR 02-AUG-2001; 2001US-00922181.  
XX  
PA (AEOM-) AEOMICA INC.  
XX  
PI Shannon M, Gu Y, Nguyen C;  
XX  
DR WPI; 2003-423107/40.  
XX  
PT New zinc finger-containing proteins and nucleic acids, useful in  
PT manufacturing a medicament for treating or preventing a disorder  
PT associated with decreased or increased expression or activity of MDZ3,  
PT MDZ4, MDZ7 or MDZ12, e.g. cancer.  
XX  
PS Example 8; SEQ ID NO 193; 103pp; English.  
XX  
CC The present invention relates to novel human zinc finger-containing  
CC proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is  
CC encoded at chromosome 7q22.1, MDZ4 is encoded at chromosome 6p21.3-22.2,  
CC MDZ7 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome  
CC 15q26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy,  
XX  
PS Example 8; SEQ ID NO 193; 103pp; English.  
XX  
CC The present invention relates to novel human zinc finger-containing  
CC proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is  
CC encoded at chromosome 7q22.1, MDZ4 is encoded at chromosome 6p21.3-22.2,  
CC MDZ7 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome  
CC 15q26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy,

CC or in manufacturing a medicament for treating or preventing a disorder  
CC associated with decreased or increased expression or activity of MDZ3,  
CC MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic  
CC acids and proteins are also useful for diagnosing or monitoring a disease  
CC caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic  
CC acids can also be used as probes to detect and characterize gross  
CC alterations in MDZ3, MDZ4, MDZ7, or MDZ12 genetic locus. The probes are  
CC useful in constructing microarrays for measuring gene expression. The  
CC proteins are useful as therapeutic agents for gene therapy or as  
CC vaccines. The present sequence was used to illustrate the invention.  
XX  
SQ Sequence 17 BP; 7 A; 1 C; 6 G; 3 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1491 TGGAGAAAATGGAGAAA 1507  
Db 1 TGGTGAACCTGGAGAAA 17  
RESULT 4472  
ADA99789  
ID ADA99789 standard; DNA; 17 BP.  
XX  
AC ADA99789;  
XX  
DT 20-NOV-2003 (first entry)  
XX  
DE Human MDZ3 scanning oligonucleotide SEQ ID 778.  
XX  
KW Cytostatic; immunostimulant; gene therapy; vaccine; human;  
KW zinc finger protein; MDZ3; MDZ4; MDZ7; MDZ12; chromosome 7q22.1;  
KW chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;  
KW developmental disorder; ss.  
XX  
OS Homo sapiens.  
XX  
PN EP1281758-A2.  
XX  
PD 05-FEB-2003.  
XX  
PF 30-JUL-2002; 2002EP-00016874.  
XX  
PR 02-AUG-2001; 2001US-00922181.  
XX  
PA (AEOM-) AEOMICA INC.  
XX  
PI Shannon M, Gu Y, Nguyen C;  
XX  
DR WPI; 2003-423107/40.  
XX  
PT New zinc finger-containing proteins and nucleic acids, useful in  
PT manufacturing a medicament for treating or preventing a disorder  
PT associated with decreased or increased expression or activity of MDZ3,  
PT MDZ4, MDZ7 or MDZ12, e.g. cancer.  
XX  
PS Example 8; SEQ ID NO 778; 103pp; English.  
XX  
CC The present invention relates to novel human zinc finger-containing  
CC proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is  
CC encoded at chromosome 7q22.1, MDZ4 is encoded at chromosome 6p21.3-22.2,  
CC MDZ7 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome  
CC 15q26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy,  
CC or in manufacturing a medicament for treating or preventing a disorder  
CC associated with decreased or increased expression or activity of MDZ3,  
CC MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic  
CC acids and proteins are also useful for diagnosing or monitoring a disease  
CC caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic  
CC acids can also be used as probes to detect and characterize gross  
CC alterations in MDZ3, MDZ4, MDZ7, or MDZ12 genetic locus. The probes are  
CC useful in constructing microarrays for measuring gene expression. The





DE	Human H-Ras DNazyme target #717.	
XX	Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;	
KW	enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytosstatic; anti-HIV;	
KW	anti-rheumatic; cancer; AIDS; ss.	
XX	Homo sapiens.	
OS	WO200297114-A2.	
XX	05-DEC-2002.	
PN	29-MAY-2002; 2002WO-US016840.	
XX	29-MAY-2001; 2001US-0294140P.	
PR	06-JUN-2001; 2001US-0296249P.	
PR	10-SEP-2001; 2001US-0318471P.	
XX	(RIBO-) RIBOZYME PHARM INC.	
XX	Mcswiggen J;	
PI	WPI; 2003-140484/13.	
XX	Novel short interfering RNA and enzymatic nucleic acid useful for	
XX	treating cancer, modulates the expression of a nucleic acid encoding	
PT	HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.	
PT	HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.	
XX	Claim 58; Page 124; 185pp; English.	
PS	The invention relates to a novel short interfering RNA (siRNA) nucleic	
XX	acid molecule or an enzymatic nucleic acid molecule, that modulates	
CC	expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,	
CC	human immunodeficiency virus (HIV) or a component of HIV. The nucleic	
CC	acid molecule of the invention has cytosstatic, anti-HIV, and anti-	
CC	rheumatic activity. The nucleic acid molecules are useful for reducing	
CC	HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are	
CC	also useful for treating breast, ovarian, colorectal, lung, prostate,	
CC	bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences	
CC	shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,	
CC	ABZ66530 - ABZ66585 represent substrate/target sequences for the human	
CC	ribozymes of the invention	
XX	Sequence 17 BP; 1 A; 10 C; 2 G; 0 T; 4 U; 0 Other;	
SQ	Query Match 0.5%; Score 13.8; DB 1; Length 17;	
	Best Local Similarity 70.6%; Pred. No. 3.2e+03;	
	Matches 12; Conservative 3; Mismatches 2; Indels 0; Gaps 0;	
QY	608 CTGCTGCTGCCCCACGC 624	
Db	1 CUGCUCUGCCCCACUC 17	
	RESULT 4476	
ABZ61300		
ID	ABZ61300 standard; RNA; 17 BP.	
XX	ABZ61300;	
AC	21-MAR-2003 (first entry)	
XX	Human H-Ras DNazyme target #91.	
DE	Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;	
XX	enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytosstatic; anti-HIV;	
KW	anti-rheumatic; cancer; AIDS; ss.	
KW	Homo sapiens.	
OS	WO200297114-A2.	
XX	05-DEC-2002.	
PN		
XX		

XX	29-MAY-2002; 2002WO-US016840.	
PF	29-MAY-2001; 2001US-0294140P.	
XX	06-JUN-2001; 2001US-0296249P.	
PR	10-SEP-2001; 2001US-0318471P.	
XX	(RIBO-) RIBOZYME PHARM INC.	
PA	Mcswiggen J;	
XX	WPI; 2003-140484/13.	
XX	Novel short interfering RNA and enzymatic nucleic acid useful for	
XX	treating cancer, modulates the expression of a nucleic acid encoding	
PT	HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.	
PT	HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.	
XX	Claim 58; Page 112; 185pp; English.	
PS	The invention relates to a novel short interfering RNA (siRNA) nucleic	
XX	acid molecule or an enzymatic nucleic acid molecule, that modulates	
CC	expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,	
CC	human immunodeficiency virus (HIV) or a component of HIV. The nucleic	
CC	acid molecule of the invention has cytosstatic, anti-HIV, and anti-	
CC	rheumatic activity. The nucleic acid molecules are useful for reducing	
CC	HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are	
CC	also useful for treating breast, ovarian, colorectal, lung, prostate,	
CC	bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences	
CC	shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,	
CC	ABZ66530 - ABZ66585 represent substrate/target sequences for the human	
CC	ribozymes of the invention	
XX	Sequence 17 BP; 2 A; 8 C; 6 G; 0 T; 1 U; 0 Other;	
SQ	Query Match 0.5%; Score 13.8; DB 1; Length 17;	
	Best Local Similarity 82.4%; Pred. No. 3.2e+03;	
	Matches 14; Conservative 1; Mismatches 2; Indels 0; Gaps 0;	
QY	1293 GCAGGCTCGCCCCAGTC 1309	
Db	1 GCAGGCCCGCCCGAGUC 17	
	RESULT 4477	
ABZ61558		
ID	ABZ61558 standard; RNA; 17 BP.	
XX	ABZ61558;	
AC	21-MAR-2003 (first entry)	
XX	Human H-Ras DNazyme target #349.	
DE	Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;	
XX	enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytosstatic; anti-HIV;	
KW	anti-rheumatic; cancer; AIDS; ss.	
KW	Homo sapiens.	
OS	WO200297114-A2.	
XX	05-DEC-2002.	
PN	29-MAY-2002; 2002WO-US016840.	
XX	29-MAY-2001; 2001US-0294140P.	
PR	06-JUN-2001; 2001US-0296249P.	
PR	10-SEP-2001; 2001US-0318471P.	
XX	(RIBO-) RIBOZYME PHARM INC.	
PA	Mcswiggen J;	
XX		

DR WPI; 2003-140484/13.

XX Novel short interfering RNA and enzymatic nucleic acid useful for

PT treating cancer, modulates the expression of a nucleic acid encoding

PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.

XX

PS Claim 58; Page 117; 185pp; English.

XX

CC The invention relates to a novel short interfering RNA (siRNA) nucleic

CC acid molecule or an enzymatic nucleic acid molecule, that modulates

CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,

CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic

CC acid molecule of the invention has cytostatic, anti-HIV, and anti-

CC rheumatic activity. The nucleic acid molecules are useful for reducing

CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are

CC also useful for treating breast, ovarian, colorectal, lung, prostate,

CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences

CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,

CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human

CC ribozymes of the invention

XX

SQ Sequence 17 BP; 2 A; 9 C; 4 G; 0 T; 2 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 17;

Best Local Similarity 76.5%; Pred. No. 3.2e+03;

Matches 13; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

QY 353 CCCTACCGAGCAGCTGGC 369

Db 1 CCCUGCCAGCAGCUGCC 17

RESULT 4478

ABZ61326/c

ID ABZ61326 standard; RNA; 17 BP.

XX

AC ABZ61326;

XX

DT 21-MAR-2003 (first entry)

DE Human H-Ras DNazyme target #117.

XX

XX Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;

KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;

KW anti-rheumatic; cancer; AIDS; ss.

XX

OS Homo sapiens.

XX

XX WO200297114-A2.

PN

XX

PD 05-DEC-2002.

XX

XX 29-MAY-2002; 2002WO-US016840.

PF

XX

XX 29-MAY-2001; 2001US-0294140P.

PR

XX 06-JUN-2001; 2001US-0296249P.

PR

XX 10-SEP-2001; 2001US-0318471P.

PR

XX (RIBO-) RIBOZYME PHARM INC.

PA

XX Mcswiggen J;

PI

XX WPI; 2003-140484/13.

DR

XX Novel short interfering RNA and enzymatic nucleic acid useful for

PT treating cancer, modulates the expression of a nucleic acid encoding

PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.

XX

PS Claim 58; Page 113; 185pp; English.

XX

CC The invention relates to a novel short interfering RNA (siRNA) nucleic

CC acid molecule or an enzymatic nucleic acid molecule, that modulates

CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,

CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,

CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic

CC acid molecule of the invention has cytostatic, anti-HIV, and anti-

CC rheumatic activity. The nucleic acid molecules are useful for reducing

CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are

CC also useful for treating breast, ovarian, colorectal, lung, prostate,

CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences

CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,

CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human

CC ribozymes of the invention

XX

SQ Sequence 17 BP; 0 A; 14 C; 3 G; 0 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 17;

Best Local Similarity 88.2%; Pred. No. 3.2e+03;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 47 GCGCGCGCGGGGGCGG 63

Db 17 GCGCGGGCGGGGGCGG 1

RESULT 4479

ACD57046/c

ID ACD57046 standard; RNA; 17 BP.

XX

AC ACD57046;

XX

DT 23-SEP-2003 (first entry)

DE HCV DNazyme substrate sequence #136.

XX

XX Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;

KW RNA stability; RNA expression; RNA synthesis; antisense;

KW enzymatic nucleic acid; hammerhead ribozyme; DNazyme; inozyme; zinzyme;

KW amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;

KW HBV reverse transcriptase; Enhancer I region; viral replication;

KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;

KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;

KW virucide; antiinflammatory; substrate; ss.

XX

OS Hepatitis C virus.

XX

XX WO200281494-A1.

PN

XX

PD 17-OCT-2002.

XX

XX 26-MAR-2002; 2002WO-US009187.

PF

XX

XX 26-MAR-2001; 2001US-00817879.

PR

XX 08-JUN-2001; 2001US-00877478.

PR

XX 08-JUN-2001; 2001US-0296876P.

PR

XX 24-OCT-2001; 2001US-0335059P.

PR

XX 05-DEC-2001; 2001US-0337055P.

XX

XX (RIBO-) RIBOZYME PHARM INC.

PA

XX (BLAT/) BLATT L.

PA

XX (MACE/) MACEJAK D.

PA

XX (MCSW/) MCSWIGGEN J.

PA

XX (MORR/) MORRISSEY D.

PA

XX (PASC/) PAVCO P.

PA

XX (LEEP/) LEE P.

PA

XX (DRAP/) DRAPER K.

PA

XX (ROBE/) ROBERTS E.

XX

XX Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;

PI Draper K, Roberts E;

PI

XX WPI; 2003-229207/22.

DR

XX Novel compound useful for treating cirrhosis, liver failure,

PT hepatocellular carcinoma, or condition associated with hepatitis C virus

PT infection.

XX

PS Claim 1; Page 236; 387pp; English.

XX The present invention relates to nucleic acid molecules which modulate

CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or

CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense

CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,

CC inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed

CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse

CC transcriptase and/or HBV reverse transcriptase primer sequences, as well

CC as oligonucleotides that specifically bind the Enhancer I region of HBV

CC DNA. The nucleic acids may be used to modulate the expression of HBV

CC genes and HBV viral replication. Also disclosed is a method for screening

CC compounds and/or potential therapies directed against HBV, and compounds

CC that modulate the expression and/or replication of HCV. The compounds and

CC methods of the invention are useful for the treatment of degenerative and

CC disease states related to HBV and HCV infection, replication and gene

CC expression such as cirrhosis, liver failure, and hepatocellular

CC carcinoma. The present sequence represents a substrate for one of the HCV

CC DNazyme or minus strand DNazyme sequences disclosed in the present

CC invention

XX SQ Sequence 17 BP; 4 A; 3 C; 6 G; 0 T; 4 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 17;

Best Local Similarity 88.2%; Pred. No. 3.2e+03;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1420 AGCCTGATTGTCATAG 1436

Db ||||| ||||| |||||

17 AGCCTCATGTCATAG 1

RESULT 4480

ACD56943

ID ACD56943 standard; RNA; 17 BP.

XX AC ACD56943;

XX 23-SEP-2003 (first entry)

XX HCV DNazyme substrate sequence #89.

KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;

KW RNA stability; RNA expression; RNA synthesis; antisense;

KW enzymatic nucleic acid; hammerhead ribozyme; DNazyme; inozyme; zinzyme;

KW amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;

KW HBV reverse transcriptase; Enhancer I region; viral replication;

KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;

KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;

KW virucide; antiinflammatory; substrate; ss.

XX Hepatitis C virus.

OS WO200281494-A1.

XX 17-OCT-2002.

XX 26-MAR-2002; 2002WO-US009187.

XX 26-MAR-2001; 2001US-00817879.

PR 08-JUN-2001; 2001US-00877478.

PR 08-JUN-2001; 2001US-0296876P.

PR 24-OCT-2001; 2001US-0335059P.

PR 05-DEC-2001; 2001US-0337055P.

XX (RIBO-) RIBOZYME PHARM INC.

PA (BLAT/) BLATT L.

PA (MACE/) MACEJAK D.

PA (MCSW/) MCSWIGGEN J.

PA (MORR/) MORRISSEY D.

PA (PAVC/) PAVCO P.

PA (LEEP/) LEE P.

PA (DRAP/) DRAPER K.

PA (ROBE/) ROBERTS E.

XX Blatt L, Macejak D, Mcswiggen J, Morrissey J, Pavco P, Lee P;

PI Draper K, Roberts E;

XX WPI; 2003-229207/22.

DR Novel compound useful for treating cirrhosis, liver failure,

XX hepatocellular carcinoma, or condition associated with hepatitis C virus

PT infection.

PT Claim 1; Page 235; 387pp; English.

XX The present invention relates to nucleic acid molecules which modulate

CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or

CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense

CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,

CC inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed

CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse

CC transcriptase and/or HBV reverse transcriptase primer sequences, as well

CC as oligonucleotides that specifically bind the Enhancer I region of HBV

CC DNA. The nucleic acids may be used to modulate the expression of HBV

CC genes and HBV viral replication. Also disclosed is a method for screening

CC compounds and/or potential therapies directed against HBV, and compounds

CC that modulate the expression and/or replication of HCV. The compounds and

CC methods of the invention are useful for the treatment of degenerative and

CC disease states related to HBV and HCV infection, replication and gene

CC expression such as cirrhosis, liver failure, and hepatocellular

CC carcinoma. The present sequence represents a substrate for one of the HCV

CC DNazyme or minus strand DNazyme sequences disclosed in the present

CC invention

XX SQ Sequence 17 BP; 4 A; 9 C; 4 G; 0 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 17;

Best Local Similarity 88.2%; Pred. No. 3.2e+03;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 440 CAGCCGCGCCACAGG 456

Db ||||| ||||| |||||

1 CAACCGCGCCACAGG 17

RESULT 4481

ACD65727/c

ID ACD65727 standard; RNA; 17 BP.

XX ACD65727;

AC 30-SEP-2003 (first entry)

XX HCV minus strand DNazyme substrate sequence #2190.

DE Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;

XX RNA stability; RNA expression; RNA synthesis; antisense;

KW enzymatic nucleic acid; hammerhead ribozyme; DNazyme; inozyme; zinzyme;

KW amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;

KW HBV reverse transcriptase; Enhancer I region; viral replication;

KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;

KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;

KW virucide; antiinflammatory; substrate; ss.

XX Hepatitis C virus.

OS WO200281494-A1.

XX 17-OCT-2002.

XX 26-MAR-2002; 2002WO-US009187.

XX 26-MAR-2001; 2001US-00817879.

PR 08-JUN-2001; 2001US-00877478.

PR 08-JUN-2001; 2001US-0296876P.



PR 24-OCT-2001; 2001US-0335059P.  
PR 05-DEC-2001; 2001US-0337055P.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
PA (BLAT/) BLATT L.  
PA (MACE/) MACEJAK D.  
PA (MCSW/) MCSWIGGEN J.  
PA (MORR/) MORRISSEY D.  
PA (PAVC/) PAVCO P.  
PA (LEEP/) LEE P.  
PA (DRAP/) DRAPER K.  
PA (ROBE/) ROBERTS E.  
XX  
PI Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;  
PI Draper K, Roberts E;  
XX WPI; 2003-229207/22.  
XX  
PT Novel compound useful for treating cirrhosis, liver failure,  
PT hepatocellular carcinoma, or condition associated with hepatitis C virus  
PT infection.  
XX  
PS Claim 1; Page 314; 387pp; English.  
XX  
CC The present invention relates to nucleic acid molecules which modulate  
CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or  
CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense  
CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,  
CC inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed  
CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse  
CC transcriptase and/or HBV reverse transcriptase primer sequences, as well  
CC as oligonucleotides that specifically bind the Enhancer I region of HBV  
CC DNA. The nucleic acids may be used to modulate the expression of HBV  
CC genes and HBV viral replication. Also disclosed is a method for screening  
CC compounds and/or potential therapies directed against HBV, and compounds  
CC that modulate the expression and/or replication of HCV. The compounds and  
CC methods of the invention are useful for the treatment of degenerative and  
CC disease states related to HBV and HCV infection, replication and gene  
CC expression such as cirrhosis, liver failure, and hepatocellular  
CC carcinoma. The present sequence represents a substrate for one of the HCV  
CC DNazyme or minus strand DNazyme sequences disclosed in the present  
CC invention  
XX  
SQ Sequence 17 BP; 0 A; 2 C; 10 G; 0 T; 5 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 438 ACCAGCCGGCGCCACA 454  
DB 17 ACCAACCGCGCCACA 1  
RESULT 4482  
ACD65623  
ID ACD65623 standard; RNA; 17 BP.  
XX  
AC ACD65623;  
XX  
DT 30-SEP-2003 (first entry)  
XX  
DE HCV minus strand DNazyme substrate sequence #2142.  
XX  
KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;  
KW RNA stability; RNA expression; RNA synthesis; antisense;  
KW enzymatic nucleic acid; hammerhead ribozyme; DNazyme; inozyme; zinzyme;  
KW amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;  
KW HBV reverse transcriptase; Enhancer I region; viral replication;  
KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;  
KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;  
KW virucide; antiinflammatory; substrate; ss.  
XX

OS Hepatitis C virus.  
XX  
PN WO200281494-A1.  
XX  
PD 17-OCT-2002.  
XX  
PF 26-MAR-2002; 2002WO-US009187.  
XX  
PR 26-MAR-2001; 2001US-00817879.  
PR 08-JUN-2001; 2001US-00877478.  
PR 08-JUN-2001; 2001US-0296876P.  
PR 24-OCT-2001; 2001US-0335059P.  
PR 05-DEC-2001; 2001US-0337055P.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
PA (BLAT/) BLATT L.  
PA (MACE/) MACEJAK D.  
PA (MCSW/) MCSWIGGEN J.  
PA (MORR/) MORRISSEY D.  
PA (PAVC/) PAVCO P.  
PA (LEEP/) LEE P.  
PA (DRAP/) DRAPER K.  
PA (ROBE/) ROBERTS E.  
XX  
PI Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;  
PI Draper K, Roberts E;  
XX WPI; 2003-229207/22.  
XX  
PT Novel compound useful for treating cirrhosis, liver failure,  
PT hepatocellular carcinoma, or condition associated with hepatitis C virus  
PT infection.  
XX  
PS Claim 1; Page 313; 387pp; English.  
XX  
CC The present invention relates to nucleic acid molecules which modulate  
CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or  
CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense  
CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,  
CC inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed  
CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse  
CC transcriptase and/or HBV reverse transcriptase primer sequences, as well  
CC as oligonucleotides that specifically bind the Enhancer I region of HBV  
CC DNA. The nucleic acids may be used to modulate the expression of HBV  
CC genes and HBV viral replication. Also disclosed is a method for screening  
CC compounds and/or potential therapies directed against HBV, and compounds  
CC that modulate the expression and/or replication of HCV. The compounds and  
CC methods of the invention are useful for the treatment of degenerative and  
CC disease states related to HBV and HCV infection, replication and gene  
CC expression such as cirrhosis, liver failure, and hepatocellular  
CC carcinoma. The present sequence represents a substrate for one of the HCV  
CC DNazyme or minus strand DNazyme sequences disclosed in the present  
CC invention  
XX  
SQ Sequence 17 BP; 5 A; 6 C; 2 G; 0 T; 4 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 64.7%; Pred. No. 3.2e+03;  
Matches 11; Conservative 4; Mismatches 2; Indels 0; Gaps 0;  
QY 1419 AAGCCCTGATTGTCATA 1435  
DB 1 AAGCCCUCAUUGCCAU 17  
RESULT 4483  
ACD56942  
ID ACD56942 standard; RNA; 17 BP.  
XX  
AC ACD56942;  
XX  
DT 23-SEP-2003 (first entry)  
XX

DE HCV DNazyme substrate sequence #88.

XX Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;

KW RNA stability; RNA expression; RNA synthesis; antisense;

KW enzymatic nucleic acid; hammerhead ribozyme; DNazyme; zinzyme;

KW amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;

KW HBV reverse transcriptase; Enhancer I region; viral replication;

KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;

KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;

KW virucide; antiinflammatory; substrate; ss.

XX Hepatitis C virus.

OS

XX WO200281494-A1.

PN

XX 17-OCT-2002.

PD

XX 26-MAR-2002; 2002WO-US009187.

PF

XX 26-MAR-2001; 2001US-00817879.

PR

XX 08-JUN-2001; 2001US-00877478.

PR

XX 08-JUN-2001; 2001US-0296876P.

PR

XX 24-OCT-2001; 2001US-0335059P.

PR

XX 05-DEC-2001; 2001US-0337055P.

XX (RIBO-) RIBOZYME PHARM INC.

PA (BLAT/) BLATT L.

PA (MACE/) MACEJAK D.

PA (MCSW/) MCSWIGGEN J.

PA (MORR/) MORRISSEY D.

PA (PAVC/) PAVCO P.

PA (LEEP/) LEE P.

PA (DRAP/) DRAPER K.

PA (ROBE/) ROBERTS E.

XX Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;

PI Draper K, Roberts E;

PI WPI; 2003-229207/22.

DR

XX Novel compound useful for treating cirrhosis, liver failure,

XX hepatocellular carcinoma, or condition associated with hepatitis C virus

PT infection.

PT

XX Claim 1; Page 235; 387pp; English.

PS

XX The present invention relates to nucleic acid molecules which modulate

CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or

CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense

CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,

CC inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed

CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse

CC transcriptase and/or HBV reverse transcriptase primer sequences, as well

CC as oligonucleotides that specifically bind the Enhancer I region of HBV

CC DNA. The nucleic acids may be used to modulate the expression of HBV

CC genes and HBV viral replication. Also disclosed is a method for screening

CC compounds and/or potential therapies directed against HBV, and compounds

CC that modulate the expression and/or replication of HCV. The compounds

CC methods of the invention are useful for the treatment of degenerative and

CC disease states related to HBV and HCV infection, replication and gene

CC expression such as cirrhosis, liver failure, and hepatocellular

CC carcinoma. The present sequence represents a substrate for one of the HCV

CC DNazyme or minus strand DNazyme sequences disclosed in the present

CC invention

XX

SQ Sequence 17 BP; 4 A; 11 C; 2 G; 0 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 17;

Best Local Similarity 88.2%; Pred. No. 3.2e+03;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 437 CACCAGCGCGGCCAC 453

||||| ||| |||||

Db 1 CACCAACCGCGGCCAC 17

RESULT 4484

ACC67022

ID ACC67022 standard; DNA; 17 BP.

XX

AC ACC67022;

XX

DT 01-JUL-2003 (first entry)

XX

DE Murine oligonucleotide associated with tumour supression, SEQ ID 4269.

XX

KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine;

KW tumour suppression; tumour reversion; apoptosis; virus resistance;

KW viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;

KW schizopphrenia; ss.

XX

OS Mus musculus.

XX

PN WO20C3025176-A2.

XX

PD 27-MAR-2003.

XX

PF 17-SEP-2002; 2002WO-IB004210.

XX

PR 17-SEP-2001; 2001FR-00011979.

XX

PA (MOLE-) MOLECULAR ENGINES LAB.

XX

PI Telerman A, Amson R, Tuijnder M;

XX WPI; 2003-333167/31.

DR

XX New isolated nucleic acid, useful for treating viral diseases associated

PT with tumors and cell degeneration, also related polypeptides, antibodies

PT and transfected cells.

XX

PS Disclosure; Page 530; 738pp; French.

XX

CC The present invention relates to murine oligonucleotides (ACC62754-

CC ACC68806), which are associated with tumour suppression, tumour

CC reversion, apoptosis and virus resistance. The oligonucleotides are

CC useful as (1) as probes and primers for detecting, identifying,

CC quantifying and/or amplifying nucleic acid, e.g. as one component of a

CC gene chip; in vitro as (anti)sense reagents; and (2) for production of a

CC recombinant polypeptides. The oligonucleotides are useful for preparation

CC of pharmaceuticals for prevention and/or treatment of viral diseases that

CC are characterised by development of tumours or cell degeneration,

CC specifically cancer but also Alzheimer's disease and schizopphrenia

XX

SQ Sequence 17 BP; 4 A; 3 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 17;

Best Local Similarity 88.2%; Pred. No. 3.2e+03;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 122 GATCCTGGATTAACTG 138

||||| ||| |||||

Db 1 GATCCTGGATTACATG 17

RESULT 4485

ACC68550

ID ACC68550 standard; DNA; 17 BP.

XX

AC ACC68550;

XX

DT 01-JUL-2003 (first entry)

XX

DE Murine oligonucleotide associated with tumour supression, SEQ ID 5797.

XX

KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine;

KW tumour suppression; tumour reversion; apoptosis; virus resistance;  
KW viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;  
KW schizophrenia; ss.  
OS Mus musculus.  
XX  
PN WO2003025176-A2.  
XX  
PD 27-MAR-2003.  
XX  
PF 17-SEP-2002; 2002WO-IB004210.  
XX  
PR 17-SEP-2001; 2001FR-00011979.  
XX  
PA (MOLE-) MOLECULAR ENGINES LAB.  
XX  
PI Telerman A, Amson R, Tuijnder M;  
XX  
DR WPI; 2003-333167/31.  
XX  
XX New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.  
PS Disclosure; Page 708; 738pp; French.  
XX  
XX The present invention relates to murine oligonucleotides (ACC62754-ACC68806), which are associated with tumour suppression, tumour reversion, apoptosis and virus resistance. The oligonucleotides are useful as (1) as probes and primers for detecting, identifying, quantifying and/or amplifying nucleic acid, e.g. as one component of a gene chip; in vitro as (anti)sense reagents; and (2) for production of recombinant polypeptides. The oligonucleotides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration, specifically cancer but also Alzheimer's disease and schizophrenia  
XX  
SQ Sequence 17 BP; 4 A; 3 C; 3 G; 7 T; 0 U; 0 Other;  
XX  
XX Query Match 0.5%; Score 13.8; DB 1; Length 17;  
XX Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
XX Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 2013 GATCAAGTCCTCTGGTA 2029  
Db 1 GATCAAGTCCTTTGTTA 17  
RESULT 4486  
ACC65305  
ID ACC65305 standard; DNA; 17 BP.  
XX  
AC ACC65305;  
XX  
DT 01-JUL-2003 (first entry)  
XX  
DE Murine oligonucleotide associated with tumour suppression, SEQ ID 2552.  
XX  
KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine;  
KW tumour suppression; tumour reversion; apoptosis; virus resistance;  
KW viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;  
KW schizophrenia; ss.  
XX  
OS Mus musculus.  
XX  
XX WO2003025176-A2.  
XX  
PD 27-MAR-2003.  
XX  
XX 17-SEP-2002; 2002WO-IB004210.  
PF  
XX  
PR 17-SEP-2001; 2001FR-00011979.  
XX

PA (MOLE-) MOLECULAR ENGINES LAB.  
XX  
PI Telerman A, Amson R, Tuijnder M;  
XX  
DR WPI; 2003-333167/31.  
XX  
XX New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.  
PS Disclosure; Page 329; 738pp; French.  
XX  
XX The present invention relates to murine oligonucleotides (ACC62754-ACC68806), which are associated with tumour suppression, tumour reversion, apoptosis and virus resistance. The oligonucleotides are useful as (1) as probes and primers for detecting, identifying, quantifying and/or amplifying nucleic acid, e.g. as one component of a gene chip; in vitro as (anti)sense reagents; and (2) for production of recombinant polypeptides. The oligonucleotides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration, specifically cancer but also Alzheimer's disease and schizophrenia  
XX  
SQ Sequence 17 BP; 4 A; 3 C; 5 G; 5 T; 0 U; 0 Other;  
XX  
XX Query Match 0.5%; Score 13.8; DB 1; Length 17;  
XX Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
XX Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 2013 GATCAAGTCCTCTGGTA 2029  
Db 1 GATCAAGTCCTTTGGGA 17  
RESULT 4487  
ADB41005  
ID ADB41005 standard; DNA; 17 BP.  
XX  
AC ADB41005;  
XX  
DT 18-DEC-2003 (revised)  
DT 04-DEC-2003 (first entry)  
XX  
DE Tumour suppression/reversion associated nucleotide #1328.  
XX  
KW cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;  
KW primer; probe; tumour suppression; tumour reversion; apoptosis;  
KW virus resistance; transgenic animals; Alzheimer's disease; schizophrenia; diagnosis.  
XX  
OS Homo sapiens.  
XX  
PN WO2003040369-A2.  
XX  
PD 15-MAY-2003.  
XX  
PF 17-SEP-2002; 2002WO-IB004219.  
XX  
PR 17-SEP-2001; 2001FR-00011981.  
XX  
PA (MOLE-) MOLECULAR ENGINES LAB.  
XX  
PI Telerman A, Amson R, Tuijnder M;  
XX  
DR WPI; 2003-441574/41.  
XX  
XX New nucleic acid encoding human prostate membrane-specific antigen, useful e.g. for treatment of tumors and viral infection, also related polypeptide and antibodies.  
PS Disclosure; Page 187; 771pp; French.  
XX  
XX The invention relates to the isolation of 6327 nucleotide sequences,



CC fragments of at least 15 consecutive nucleotides of these nucleotides, a  
CC sequence having at least 80% identity, after optimal alignment, with the  
CC nucleotides, a sequence that hybridizes under stringent conditions with  
CC the nucleotides, or the complement, or corresponding RNA, of the  
CC nucleotides. The nucleotides are used as probes or primers for detecting,  
CC identifying, quantifying and/or amplifying nucleic acids, as in vitro  
CC sense and antisense sequences, of nucleotides involved in tumour  
CC suppression or reversion, apoptosis and or viral resistance, to produce  
CC recombinant polypeptides, and to prepare transgenic animals, as  
CC experimental models. The nucleotides (also vectors containing them and  
CC cells containing the vectors), the encoded polypeptides and antibodies  
CC (Ab) against the polypeptide are useful for prevention and/or treatment  
CC of viral infections or diseases characterized by development of tumours  
CC or cell degeneration (e.g. Alzheimer's disease or schizophrenia).  
CC Analysis of the expression of the nucleotides can be used for diagnosis  
CC and/or prognosis of these diseases. The nucleotides and polypeptides can  
CC also be used to screen for their specific interactive molecules,  
CC potentially useful for treating diseases associated with abnormal  
CC expression of the nucleotides.  
XX  
SQ Sequence 17 BP; 6 A; 2 C; 1 G; 8 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 2460 GATCCAAATTTTAAATATT 2476  
Db 1 GATCAAAATTTTAAATCTT 17  
RESULT 4488  
ADB42684  
ID ADB42684 standard; DNA; 17 BP.  
XX  
AC ADB42684;  
XX  
DT 18-DEC-2003 (revised)  
DT 04-DEC-2003 (first entry)  
XX  
DE Tumour suppression/reversion associated nucleotide #3007.  
XX  
KW cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;  
KW primer; probe; tumour suppression; tumour reversion; apoptosis;  
KW virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;  
KW diagnosis.  
XX  
OS Homo sapiens.  
XX  
PN WO2003040369-A2.  
XX  
PD 15-MAY-2003.  
XX  
PF 17-SEP-2002; 2002WO-IB004219.  
XX  
PR 17-SEP-2001; 2001FR-00011981.  
XX  
PA (MOLE-) MOLECULAR ENGINES LAB.  
XX  
PI Telerman A, Amson R, Tuijnder M;  
XX  
DR WPI; 2003-441574/41.  
XX  
PT New nucleic acid encoding human prostate membrane-specific antigen,  
PT useful e.g. for treatment of tumors and viral infection, also related  
PT polypeptide and antibodies.  
XX  
PS Disclosure; Page 383; 771pp; French.  
XX  
CC The invention relates to the isolation of 6327 nucleotide sequences,  
CC fragments of at least 15 consecutive nucleotides of these nucleotides, a  
CC sequence having at least 80% identity, after optimal alignment, with the  
CC nucleotides, a sequence that hybridizes under stringent conditions with

CC the nucleotides, or the complement, or corresponding RNA, of the  
CC nucleotides. The nucleotides are used as probes or primers for detecting,  
CC identifying, quantifying and/or amplifying nucleic acids, as in vitro  
CC sense and antisense sequences, of nucleotides involved in tumour  
CC suppression or reversion, apoptosis and or viral resistance, to produce  
CC recombinant polypeptides, and to prepare transgenic animals, as  
CC experimental models. The nucleotides (also vectors containing them and  
CC cells containing the vectors), the encoded polypeptides and antibodies  
CC (Ab) against the polypeptide are useful for prevention and/or treatment  
CC of viral infections or diseases characterized by development of tumours  
CC or cell degeneration (e.g. Alzheimer's disease or schizophrenia).  
CC Analysis of the expression of the nucleotides can be used for diagnosis  
CC and/or prognosis of these diseases. The nucleotides and polypeptides can  
CC also be used to screen for their specific interactive molecules,  
CC potentially useful for treating diseases associated with abnormal  
CC expression of the nucleotides.  
XX  
SQ Sequence 17 BP; 4 A; 7 C; 2 G; 4 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 752 GGTCCTCATTTCCATGAC 768  
Db 1 GATCCCATCTCCATGAC 17  
RESULT 4489  
ADB44777/c  
ID ADB44777 standard; DNA; 17 BP.  
XX  
AC ADB44777;  
XX  
DT 18-DEC-2003 (first entry)  
XX  
DE Tumour suppression/reversion associated nucleotide #5100.  
XX  
KW cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;  
KW primer; probe; tumour suppression; tumour reversion; apoptosis;  
KW virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;  
KW diagnosis.  
XX  
OS Homo sapiens.  
XX  
PN WO2003040369-A2.  
XX  
PD 15-MAY-2003.  
XX  
PF 17-SEP-2002; 2002WO-IB004219.  
XX  
PR 17-SEP-2001; 2001FR-00011981.  
XX  
PA (MOLE-) MOLECULAR ENGINES LAB.  
XX  
PI Telerman A, Amson R, Tuijnder M;  
XX  
DR WPI; 2003-441574/41.  
XX  
PT New nucleic acid encoding human prostate membrane-specific antigen,  
PT useful e.g. for treatment of tumors and viral infection, also related  
PT polypeptide and antibodies.  
XX  
PS Disclosure; Page 628; 771pp; French.  
XX  
CC The invention relates to the isolation of 6327 nucleotide sequences,  
CC fragments of at least 15 consecutive nucleotides of these nucleotides, a  
CC sequence having at least 80% identity, after optimal alignment, with the  
CC nucleotides, a sequence that hybridizes under stringent conditions with  
CC the nucleotides, or the complement, or corresponding RNA, of the  
CC nucleotides. The nucleotides are used as probes or primers for detecting,  
CC identifying, quantifying and/or amplifying nucleic acids, as in vitro  
CC sense and antisense sequences, of nucleotides involved in tumour

CC suppression or reversion, apoptosis and or viral resistance, to produce  
CC recombinant polypeptides, and to prepare transgenic animals, as  
CC experimental models. The nucleotides (also vectors containing them and  
CC cells containing the vectors), the encoded polypeptides and antibodies  
CC (Ab) against the polypeptide are useful for prevention and/or treatment  
CC of viral infections or diseases characterized by development of tumours  
CC or cell degeneration (e.g. Alzheimer's disease or schizophrenia).  
CC Analysis of the expression of the nucleotides can be used for diagnosis  
CC and/or prognosis of these diseases. The nucleotides and polypeptides can  
CC also be used to screen for their specific interactive molecules,  
CC potentially useful for treating diseases associated with abnormal  
CC expression of the nucleotides.

SQ Sequence 17 BP; 4 A; 5 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 202 AGAGGACTGCGAGGATC 218  
Db 17 ATATGACTGCGAGGATC 1

RESULT 4490  
ADB44262/c

ID ADB44262 standard; DNA; 17 BP.

XX ADB44262;

AC 18-DEC-2003 (first entry)

DT Tumour suppression/reversion associated nucleotide #4585.

DE cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;  
KW primer; probe; tumour suppression; tumour reversion; apoptosis;  
KW virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;  
KW diagnosis.

XX Homo sapiens.

OS WO2003040369-A2.

PN 15-MAY-2003.

PD 17-SEP-2002; 2002WO-IB004219.

PF 17-SEP-2001; 2001FR-00011981.

PR (MOLE-) MOLECULAR ENGINES LAB.

XX Telerman A, Amson R, Tuijnder M;

PI WPI; 2003-441574/41.

XX New nucleic acid encoding human prostate membrane-specific antigen,  
PT useful e.g. for treatment of tumors and viral infection, also related  
PT polypeptide and antibodies.

PS Disclosure; Page 568; 771pp; French.

XX The invention relates to the isolation of 6327 nucleotide sequences,  
CC fragments of at least 15 consecutive nucleotides of these nucleotides, a  
CC sequence having at least 80% identity, after optimal alignment, with the  
CC nucleotides, a sequence that hybridizes under stringent conditions with  
CC the nucleotides, or the complement, or corresponding RNA, of the  
CC nucleotides. The nucleotides are used as probes or primers for detecting,  
CC identifying, quantifying and/or amplifying nucleic acids, as in vitro  
CC sense and antisense sequences, of nucleotides involved in tumour  
CC suppression or reversion, apoptosis and or viral resistance, to produce  
CC recombinant polypeptides, and to prepare transgenic animals, as  
CC experimental models. The nucleotides (also vectors containing them and  
CC cells containing the vectors), the encoded polypeptides and antibodies

CC (Ab) against the polypeptide are useful for prevention and/or treatment  
CC of viral infections or diseases characterized by development of tumours  
CC or cell degeneration (e.g. Alzheimer's disease or schizophrenia).  
CC Analysis of the expression of the nucleotides can be used for diagnosis  
CC and/or prognosis of these diseases. The nucleotides and polypeptides can  
CC also be used to screen for their specific interactive molecules,  
CC potentially useful for treating diseases associated with abnormal  
CC expression of the nucleotides.

SQ Sequence 17 BP; 3 A; 6 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.2e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 202 AGAGGACTGCGAGGATC 218  
Db 17 AGAGGACTGCTCGGATC 1

RESULT 4491  
ADD20961/c

ID ADD20961 standard; DNA; 17 BP.

XX ADD20961;

AC 15-JAN-2004 (first entry)

XX Human GAP\_N DNA 17-mer oligo #193.

DE gene therapy; antibody therapy; modulator of GAPN;  
KW GTP-activator for Rab-like GTPase; GAP\_N; immunogen; ss.

XX Homo sapiens.

OS WO2003033703-A2.

PN 24-APR-2003.

PD 11-OCT-2002; 2002WO-US032597.

PF 15-OCT-2001; 2001US-0330323P.

PR (AMSH ) AMERSHAM BIOSCIENCES SV CORP.

XX Zhang J;

PI WPI; 2003-403224/38.

XX Novel human GTP-activator protein for Rab-like GTPase and polynucleotide  
PT encoding the protein, useful for diagnosing, treating or preventing  
PT disorders associated with increased expression or activity of the  
PT protein.

PS Example 2; SEQ ID NO 217; 149pp; English.

XX The invention relates to an isolated human GTP-activator protein for Rab-  
CC like GTPase (GAPN) polypeptide (I), a sequence having 65% identity to  
CC (I), a sequence in which at least 95% of deviations from (I) are  
CC conservative substitutions, or a fragment of at least 8 contiguous amino  
CC acids of (I). The polypeptide is useful for identifying a specific  
CC binding partner for itself, by contacting the polypeptide in vivo to a  
CC potential binding partner and determining if the polypeptide binding  
CC partner binds to the polypeptide. (I) and a nucleic acid encoding the  
CC polypeptide (II) are useful for diagnosing or monitoring a disease caused  
CC by altered expression of GAPN, by determining the level of expression of  
CC GAPN in a sample of nucleic acids or proteins that derives from a subject  
CC suspected to have the disease, alterations from a normal level of  
CC expression providing diagnostic and/or monitoring information. (I), (II)  
CC or agonist of (I) is useful for treating or preventing a disorder  
CC associated with decreased expression or activity of GAPN, and an  
CC antagonist of (I) is useful for treating or preventing a disorder  
CC associated with increased expression or activity of GAPN (all claimed).





```
RESULT 4494
ADE30707
ID ADE30707 standard; DNA; 17 BP.
XX
AC ADE30707;
XX
DT 29-JAN-2004 (first entry)
XX
DE Cholesterol homeostasis/adipogenesis related DNA seq id 94.
XX
KW expression vector; anorectic; antiarteriosclerotic; cardiant;
KW antidiabetic; elevated cholesterol; elevated lipid; adipogenesis;
KW obesity; atherosclerosis; diabetes mellitus;
KW coronary artery heart disease; cholesterol homeostasis; ss;
KW differntial expression.
XX
OS Homo sapiens.
XX
PN US2003180764-A1.
XX
PD 25-SEP-2003.
XX
PF 08-JAN-2003; 2003US-00339793.
XX
PR 09-JAN-2002; 2002US-0347286P.
XX
PA (LYNX-) LYNX THERAPEUTICS INC.
XX
PI Shang J, Bowen B;
XX
DR WPI; 2003-830986/77.
XX
PT Polynucleotides differentially regulated in response to cholesterol and
PT adipogenesis are useful to detect and treat associated conditions such as
PT obesity, atherosclerosis, diabetes mellitus and coronary artery heart
PT disease.
XX
PS Claim 8; SEQ ID NO 94; 59pp; English.
XX
CC The invention describes a composition comprising at least one expression
CC vector comprising a polynucleotide of the invention. The composition has
CC anorectic, antiarteriosclerotic, cardiant and antidiabetic properties.
CC The invention is used to detect and treat conditions associated with
CC elevated cholesterol and lipid or during adipogenesis, particularly
CC obesity, atherosclerosis, diabetes mellitus or coronary artery heart
CC disease. This sequence represents a polynucleotide differentially
CC expressed during cholesterol homeostasis and adipogenesis.
XX
SQ Sequence 17 BP; 4 A; 2 C; 1 G; 10 T; 0 U; 0 Other;
Query Match 0.5%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 3.2e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2460 GATCCAAATTTTAAATATT 2476
Db 1 GATCCTATTTTAAATTTT 17

RESULT 4495
AAQ20007
ID AAQ20007 standard; DNA; 18 BP.
XX
AC AAQ20007;
XX
DT 01-APR-1992 (first entry)
XX
DE Oligonucleotide #3 able to covalently cross-link to target DNA.
XX deoxyribonucleic acid; major groove; ethanoamino group;
KW aziridinylcytosine; cross-linking group; ss.
```

```
XX OS Synthetic.
XX FH Key
FT modified_base 1 Location/Qualifiers
FT /*tag= a
FT /mod_base= OTHER
FT /note= "N4N4-ethanocytosine"
FT modified_base 9
FT /*tag= b
FT /mod_base= m5c
FT modified_base 15
FT /*tag= c
FT /mod_base= m5c
FT modified_base 18
FT /*tag= da
FT /mod_base= OTHER
FT /note= "N4N4-ethanocytosine"
XX
PN WO9118997-A.
XX
XX 12-DEC-1991.
PD
XX
XX 25-MAY-1990; 90US-00529346.
PF
XX
PR 25-MAY-1990; 90US-00529346.
PR 14-JAN-1991; 91US-00640654.
XX
PA (GILE-) GILEAD SCIE INC.
XX
XX Matteucci MD, Krawczyk S;
PI
XX WPI; 1992-007480/01.
DR
XX
PT New sequence-specific non-photo-activated crosslinking agents - bind to
PT the major groove of duplex DNA and are esp. useful for treating latent
PT infections e.g. HIV.
XX
PS Example 2; Page 21; 42pp; English.
XX
CC The 3' end of this oligonucleotide carries 1,3-propanediol. The oligo is
CC one of four oligonucleotides which were designed to specifically bind and
CC cross-link to the duplex target sequence AAQ20004. Oligo #3 has a
CC covalent cross-linking group, i.e. N4N4-ethanocytosine, at its 5'- and 3'-
CC ends. An assay for crosslinked triple helix showed the most complete
CC reaction with Oligo #3. A control oligo with no cross-linking group
CC showed no reaction while Oligos #1 (see AAQ20005) and #2 (AAQ20006) with
CC the crosslinking group at the 5' and 3' ends, respectively, showed
CC considerable reaction. An oligonucleotide with N4N4-ethanocytosine within
CC its sequence (see AAQ20008) showed less effective binding
XX
SQ Sequence 18 BP; 0 A; 4 C; 0 G; 14 T; 0 U; 0 Other;
Query Match 0.5%; Score 13.8; DB 1; Length 18;
Best Local Similarity 88.2%; Pred. No. 3.6e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2165 CTTTTTTTTTTTTTTTTT 2181
Db 1 CTTTTTTCTTTTCTT 17

RESULT 4496
AAQ20007/c
ID AAQ20007 standard; DNA; 18 BP.
XX
AC AAQ20007;
XX
DT 01-APR-1992 (first entry)
XX
DE Oligonucleotide #3 able to covalently cross-link to target DNA.
XX deoxyribonucleic acid; major groove; ethanoamino group;
```

KW aziridinylcytosine; cross-linking group; ss.  
XX  
OS Synthetic.  
XX  
FH Key Location/Qualifiers  
FT modified\_base 1 /\*tag= a  
FT /\*mod\_base= OTHER  
FT modified\_base 9 /note= "N4N4-ethanocytosine"  
FT /\*tag= b  
FT /\*mod\_base= m5c  
FT modified\_base 15  
FT /\*tag= c  
FT /\*mod\_base= m5c  
FT modified\_base 18  
FT /\*tag= da  
FT /\*mod\_base= OTHER  
FT /\*note= "N4N4-ethanocytosine"  
XX  
PN WO9118997-A.  
XX  
PD 12-DEC-1991.  
XX  
XX 25-MAY-1990; 90US-00529346.  
PF 25-MAY-1990; 90US-00529346.  
XX 14-JAN-1991; 91US-00640654.  
PR  
XX  
PA (GILE-) GILEAD SCIE INC.  
XX  
PI Matteucci MD, Krawczyk S;  
XX  
XX WPI; 1992-007480/01.  
DR  
XX  
PT New sequence-specific non-photo-activated crosslinking agents - bind to  
PT the major groove of duplex DNA and are esp. useful for treating latent  
PT infections e.g. HIV.  
XX  
XX Example 2; Page 21; 42pp; English.  
PS  
XX The 3' end of this oligonucleotide carries 1,3-propanediol. The oligo is  
CC one of four oligonucleotides which were designed to specifically bind and  
CC cross-link to the duplex target sequence AAQ20004. Oligo #3 has a  
CC covalent cross-linking group, i.e. N4N4-ethanocytosine, at its 5' and 3'  
CC -ends. An assay for crosslinked triple helix showed the most complete  
CC reaction with Oligo #3. A control oligo with no cross-linking group  
CC showed no reaction while Oligos #1 (see AAQ20005) and #2 (AAQ20006) with  
CC the crosslinking group at the 5' and 3' ends, respectively, showed  
CC considerable reaction. An oligonucleotide with N4N4-ethanocytosine within  
CC its sequence (see AAQ20008) showed less effective binding  
XX  
SQ Sequence 18 BP; 0 A; 4 C; 0 G; 14 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 18;  
Best Local Similarity 88.2%; Pred. No. 3.6e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 2785 GAAAAAAGAAAAA 2801  
DB 18 GAAGAAAAAGAAAAA 2  
RESULT 4497  
AAQ36431  
ID AAQ36431 standard; DNA; 18 BP.  
XX  
XX AAQ36431;  
AC  
XX 25-MAR-2003 (revised)  
DT 05-MAR-1993 (first entry)  
XX  
DE GRP-R primer (EXT 3).

XX Gastrin releasing peptide; GRP; bombesin; neuromedin B; NMB; ranatensin;  
KW RBP; bombesin-like peptide; R1BP; R2BP; R2BP; receptor; agonist;  
KW antagonist; ligand; antibody; cancer; ss.  
XX  
OS Synthetic.  
XX  
PN WO9216623-A2.  
XX  
PD 01-OCT-1992.  
XX  
XX 13-MAR-1992; 92WO-US002091.  
PF  
XX 15-MAR-1991; 91US-00670603.  
PR 03-OCT-1991; 91US-00771332.  
XX  
PA (BERL-) BERLEX LAB INC.  
PA (USSH) US DEPT HEALTH & HUMAN SERVICE.  
XX  
PI Battey JF, Corjay MH, Fathi Z, Feldman RI, Harkin RN;  
PI Slattery TK, Wada E, Wu JM;  
XX  
DR WPI; 1992-349208/42.  
XX  
PT Receptors for bombesin-like peptide(s) and their DNA - useful for  
PT screening for agonists and antagonists of the receptor ligands, also for  
PT treating or diagnosing cancer.  
XX  
PS Example 12; Page 85-91; 173pp; English.  
XX  
CC The primers of AAQ36431-32 were used in the identification of cDNA clone  
CC encoding the Swiss 3T3 GRP Receptor. EXT 3 (AAQ36431) was used as a gene-  
CC specific primer for reverse transcription of Swiss 3T3 mRNA, and EXT 2  
CC (AAQ36432) was used as a gene specific primer for Taq DNA polymerase  
CC catalysed PCR. The DNA sequences encoding mouse R1BP; human R1BP; rat  
CC R2BP; human R2BP and human R3BP are given in AAQ29158-62 respectively.  
CC The receptor gene and encoded polypeptide are used for screening for  
CC agonists and antagonists of the receptor ligands, for producing  
CC diagnostic or therapeutic reagents, and for producing antibodies. Hosts  
CC suffering from abnormal receptor function, e.g. proliferative cell  
CC conditions such as cancers, may be treated. The mouse GRP receptor was  
CC isolated from Swiss 3T3 fibroblasts and sequenced. The sequence was used  
CC to design oligonucleotide probes to isolate DNA encoding mouse GRP  
CC receptor from a Swiss 3T3 cDNA library. This DNA was then used as a probe  
CC to isolate rat NMB receptor, human GRP receptor, human NMB receptor and  
CC human R3BP (incompletely characterised homologous putative receptor) from  
CC DNA libraries. (Updated on 25-MAR-2003 to correct PN field.)  
XX  
SQ Sequence 18 BP; 5 A; 4 C; 9 G; 0 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 18;  
Best Local Similarity 88.2%; Pred. No. 3.6e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 455 GGCAGCCAGCAGCAGGC 471  
DB 2 GGCAGCCAGCAGCAGGC 18  
RESULT 4498  
AAQ34456  
ID AAQ34456 standard; DNA; 18 BP.  
XX  
AC AAQ34456;  
XX  
DT 17-DEC-2001 (revised)  
DT 12-MAY-1993 (first entry)  
XX  
DE DQA1 probe AG2.3, for allele 0103.  
XX  
KW Amplification; conformation polymorphism; SSCP; DQ-alpha; DQ-beta;  
KW cystic fibrosis; neurofibromatosis; ss.  
XX

OS Synthetic.  
XX  
PN USN7751892-N.  
XX  
PD 01-DEC-1992.  
XX  
PF 29-AUG-1991; 91US-00751892.  
XX  
PR 29-AUG-1991; 91US-00751892.  
XX  
PA (USSH ) US DEPT HEALTH & HUMAN SERVICE.  
XX  
PI Mann D, Dean M, Carrington M, White MB;  
XX  
DR WPI; 1993-017809/02.  
XX  
PT Distinguishing multiple alleles and identifying new alleles - by single-  
PT strand conformation polymorphism technique using specific gel  
PT electrophoresis conditions.  
XX  
PS Disclosure; Page 19; 36pp; English.  
XX  
CC The oligomer AG2.3 represents a specific probe for DQA1 allele 0103 and  
CC is used to distinguish multiple alleles of a gene of the immunoglobulin  
CC supergene family. The DNA encoding the gene of interest in a sample is  
CC amplified and then denatured. The amplified DNA is then separated on a  
CC non-denaturing polyacrylamide gel consisting of 5 percent bis-acrylamide  
CC with 0-10 percent glycerol, and the presence or absence of DNA bands  
CC showing hybridisation is detected. Before amplification of the gene, the  
CC alleles may be divided into subsets by oligonucleotide hybridisation.  
CC Using single stranded conformation polymorphism (SSCP) multiple alleles  
CC in complex genetic systems can be distinguished e.g. DQ-alpha and DQ-beta  
CC and new alleles identified. The method may be used in studying genetic  
CC associations with disease, in forensic analyses and typing tissues for  
CC transplantation. The SSCP method has been used for detection of mutant  
CC alleles which correlate with the presence of disorders such as cystic  
CC fibrosis and neurofibromatosis. See also AAQ34443-73. (Note: Revised  
CC entry submitted to correct the patent number format of US Government-  
CC owned NTIS applications to prevent clashes with ongoing US granted patent  
CC numbers. For further information please visit the Derwent web site at  
CC [www.derwent.com/dwpi/updates/ntis\\_us.html](http://www.derwent.com/dwpi/updates/ntis_us.html).)  
XX  
SQ Sequence 18 BP; 8 A; 2 C; 7 G; 1 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 18;  
Best Local Similarity 88.2%; Pred. No. 3.6e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 1489 CCTGGAGAGAAATGGAGA 1505  
Db ||||| ||||| |||||  
2 CCTGGAGAGAGAGGAGA 18  
  
RESULT 4499  
AA15198  
ID AAX15198 standard; DNA; 18 BP.  
XX  
AC AAX15198;  
XX  
DT 25-MAR-2003 (revised)  
DT 28-APR-1999 (first entry)  
XX  
DE Triple helix forming oligonucleotide.  
XX  
KW Double-stranded DNA; triple helix; quinoline;  
KW quinazoline-based structure; hydrogen bonding; ss.  
XX  
OS Synthetic.  
XX  
PN WO9623777-A1.  
XX  
PD 08-AUG-1996.

PF 29-JAN-1996; 96WO-US001473.  
XX  
PR 01-FEB-1995; 95US-00384324.  
XX  
PA (UYNE-) UNIV NEBRASKA.  
XX  
PI Gold BI;  
XX  
DR WPI; 1996-371338/37.  
XX  
PT New substd. quinoline and quinazoline cpds. - are monomers for triple  
PT helix-forming oligo:nucleotide analogues useful e.g. for treating tumours  
PT or viral infection.  
XX  
PS Disclosure; Fig 2; 102pp; English.  
XX  
CC The present sequence represents a triple helix forming oligonucleotide  
CC that form a triple helix with the double-stranded DNA sequence described  
CC in AAX15197. The specification describes novel monomeric compositions  
CC which are substituted quinoline or quinazoline-based structures capable  
CC of hydrogen bonding specifically with interstrand purine-pyrimidine pairs  
CC in a double stranded Watson-Crick DNA molecule to form a triple-helix.  
CC (Updated on 25-MAR-2003 to correct PF field.)  
XX  
SQ Sequence 18 BP; 0 A; 3 C; 0 G; 15 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 18;  
Best Local Similarity 88.2%; Pred. No. 3.6e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 2165 CTTTCTTTTCTTTTCTTTT 2181  
Db ||||| ||||| ||||| |||||  
2 CTTTCTTTTCTTTTCTTTT 18  
  
RESULT 4500  
AA15196/c  
ID AAX15196 standard; DNA; 18 BP.  
XX  
AC AAX15196;  
XX  
DT 25-MAR-2003 (revised)  
DT 28-APR-1999 (first entry)  
XX  
DE Triple helix forming oligonucleotide.  
XX  
KW Double-stranded DNA; triple helix; quinoline;  
KW quinazoline-based structure; hydrogen bonding; ss.  
XX  
OS Synthetic.  
XX  
PN WO9623777-A1.  
XX  
PD 08-AUG-1996.  
XX  
PF 29-JAN-1996; 96WO-US001473.  
XX  
PR 01-FEB-1995; 95US-00384324.  
XX  
PA (UYNE-) UNIV NEBRASKA.  
XX  
PI Gold BI;  
XX  
DR WPI; 1996-371338/37.  
XX  
PT New substd. quinoline and quinazoline cpds. - are monomers for triple  
PT helix-forming oligo:nucleotide analogues useful e.g. for treating tumours  
PT or viral infection.  
XX  
PS Disclosure; Fig 1; 102pp; English.  
XX  
CC The present sequence represents a triple helix forming oligonucleotide  
CC that form a triple helix with the double-stranded DNA sequence described



CC in AAX15195. The specification describes novel monomeric compositions  
CC which are substituted quinoline or quinazoline-based structures capable  
CC of hydrogen bonding specifically with interstrand purine-pyrimidine pairs  
CC in a double stranded Watson-Crick DNA molecule to form a triple-helix.  
CC (Updated on 25-MAR-2003 to correct PF field.)  
XX  
SQ Sequence 18 BP; 0 A; 3 C; 0 G; 15 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 18;  
Best Local Similarity 88.2%; Pred. No. 3.6e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2785 GAAAAAAGAAAAA 2801  
|||||  
Db 17 GAAAGAAAAAGAAAA 1

RESULT 4501  
AAT36431  
ID AAT36431 standard; DNA; 18 BP.

XX AAT36431;

DT 16-APR-1997 (first entry)

DE Human papillomavirus 45 (HPV45) E6 gene probe.

XX Human papillomavirus; HPV; oncogene; cervical cancer; neoplasia; probe;  
KW detection amplification; diagnosis; prognosis; high risk; low risk;  
KW ELISA; enzyme-linked immunosorbent assay; PCR; primer;  
KW polymerase chain reaction; ss.

OS Synthetic.

XX WO9625521-A1.

PN 22-AUG-1996.

XX 16-FEB-1996; 96WO-US002130.

PF 17-FEB-1995; 95US-00390684.

PR 07-JUN-1995; 95US-00479777.

XX (UYCO ) UNIV COLUMBIA NEW YORK.

XX Silverstein SJ, Lungu O, Wright TC, Richart RM;

DR WPI; 1996-393421/39.

XX Detecting high oncogenic potential human papilloma virus strains - by  
PT specific PCR of nucleic acid in cervical cells, reacting amplified prod.  
PT with specific probe and detecting bound probe by ELISA.

XX Claim 10; Page 21; 56pp; English.

XX AAT36430-T36432 are a 5' primer, probe and 3' primer, respectively, used  
CC for the amplification and detection of human papillomavirus 45 (HPV45) E6  
CC gene. The E6 gene product is implicated in human papillomavirus  
CC carcinogenesis and therefore should be present in all HPV related  
CC cervical carcinomas. The primers and probe are used in a PCR/ELISA method  
CC for the diagnosis of HPV45 in a sample. HPV45 is a high-risk oncogenic  
CC HPV type, detection of the E6 gene in a sample indicates a high risk of  
CC cervical cancer development. Primers and probes for low-risk HPV types  
CC (HPV6, HPV11, HPV30, etc.) are also used in the same PCR/ELISA method for  
CC diagnosis of oncogenic potential of a cervical smear. The probes and  
CC primers are also useful for diagnosing cervical cancer and high grade  
CC cervical lesions

XX Sequence 18 BP; 7 A; 2 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 18;  
Best Local Similarity 88.2%; Pred. No. 3.6e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1499 ATGGAGAACACAGGAA 1515  
|||||  
Db 2 ATGGAGAGACACTGGAA 18

RESULT 4502

AAT93487

ID AAT93487 standard; DNA; 18 BP.

XX AAT93487;

DT 11-FEB-1998 (first entry)

DE DQA1 allele determining DNA DQA4102 strand A.

XX DQA1; DQA4102; histocompatibility locus; allele; resequencing analysis;  
KW flow cytometry; Differentially fluorescent microsphere; DFM; human;  
KW multiplex assay; bead-set; fluorophore; epitope mapping; screening;  
KW therapeutic drug; multiple analyte; gene mutation; PCR primer; ss.

XX Synthetic.

OS Homo sapiens.

XX WO9714028-A2.

PN 17-APR-1997.

XX 10-OCT-1996; 96WO-US016198.

PF 11-OCT-1995; 95US-00540814.

PR 11-OCT-1995; 95US-00542401.

XX (LUMI-) LUMINEX CORP.

XX Chandler VS, Fulton RJ, Chandler MB;

XX WPI; 1997-236023/21.

XX Bead-sets for simultaneous assay of multiple analytes by cytometric  
PT analysis - comprise many subsets carrying specific reagent and  
PT identifiable from all other subsets by fluorescence parameters,  
PT especially for clinical assays, and detecting gene mutation.

XX Disclosure; Page 102; 293pp; English.

XX This DNA sequence DQA4102 determines DQA1 allele. The allele specific for  
CC this DNA is 0103. The 8 major alleles of the DQA1 gene are determined by  
CC fourteen unique DNA sequences contained within a 227 bp PCR product. This  
CC is used in flow cytometry to perform resequencing analysis of the PCR  
CC products where the presence or absence of all fourteen DNA sequences can  
CC be determined simultaneously in a single reaction tube containing the  
CC mixed bead-set. The system is based on competitive hybridisation between  
CC the PCR product and complementary oligonucleotide pairs representing the  
CC unique DNA sequences. This strand is labelled with a green emitting  
CC fluorophore and the complementary strand of this oligonucleotide pair is  
CC coupled to a unique subset of microspheres. This fluorescent  
CC oligonucleotide and the PCR product are added to the bead-set containing  
CC the microsphere subset and the mixture is hybridised and analysed by flow  
CC cytometry. The other DNA pairs of sequences are labelled and coupled  
CC similarly. The ability of the PCR product to inhibit the hybridisation of  
CC the fluorescent oligonucleotides to their respective microsphere subset  
CC is used to determine the DNA sequence and the corresponding alleles  
CC present in the PCR product. The flow cytometry method using the novel  
CC bead-sets can also be used in quantitative and qualitative assay of  
CC illicit or therapeutic drugs, antigens, auto antibodies, analytes  
CC commonly elevated during pregnancy or nucleic acids, epitope screening of  
CC a monoclonal antibody and for detecting specific gene mutations

XX Sequence 18 BP; 8 A; 2 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 18;  
Best Local Similarity 88.2%; Pred. No. 3.6e+03;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1489 CCTGGAGAAATGGAGA 1505  
||||||| |  
Db 2 CCTGGAGAGAGGAGA 18

RESULT 4503  
AAT93488/c  
ID AAT93488 standard; DNA; 18 BP.  
XX AC AAT93488;  
XX DT 11-FEB-1998 (first entry)  
XX DE DQA1 allele determining DNA DQA4102 strand B.  
XX KW DQA1; DQA4102; histocompatibility locus; allele; resequencing analysis;  
KW flow cytometry; Differentially fluorescent microsphere; DFM; human;  
KW multiplex assay; bead-set; fluorophore; epitope mapping; screening;  
KW therapeutic drug; multiple analyte; gene mutation; PCR primer; ss.  
XX OS Synthetic.  
OS Homo sapiens.  
XX PN WO9714028-A2.  
XX PD 17-APR-1997.  
XX PF 10-OCT-1996; 96WO-US016198.  
XX PR 11-OCT-1995; 95US-00540814.  
PR 11-OCT-1995; 95US-00542401.  
XX PA (LJMI-) LUMINEX CORP.  
XX PI Chandler VS, Fulton RJ, Chandler MB;  
XX WPI; 1997-236023/21.  
XX DR Bead-sets for simultaneous assay of multiple analytes by cytometric  
XX analysis - comprise many subsets carrying specific reagent and  
PT identifiable from all other subsets by fluorescence parameters,  
PT especially for clinical assays, and detecting gene mutation.  
XX PS Disclosure; Page 102; 293pp; English.  
XX CC This DNA sequence DQA4102 determines DQA1 allele. The allele specific for  
CC this DNA is 0103. The 8 major alleles of the DQA1 gene are determined by  
CC fourteen unique DNA sequences contained within a 227 bp PCR product. This  
CC is used in flow cytometry to perform resequencing analysis of the PCR  
CC products where the presence or absence of all fourteen DNA sequences can  
CC be determined simultaneously in a single reaction tube containing the  
CC mixed bead-set. The system is based on competitive hybridisation between  
CC the PCR product and complementary oligonucleotide pairs representing the  
CC unique DNA sequences. This strand is coupled to a unique subset of  
CC microspheres and the complementary strand of this oligonucleotide pair is  
CC labelled with a green emitting fluorophore. The fluorescent  
CC oligonucleotide and the PCR product are added to the bead-set containing  
CC the microsphere subset and the mixture is hybridised and analysed by flow  
CC cytometry. The other DNA pairs of sequences are labelled and coupled  
CC similarly. The ability of the PCR product to inhibit the hybridisation of  
CC the fluorescent oligonucleotides to their respective microsphere subset  
CC is used to determine the DNA sequence and the corresponding alleles  
CC present in the PCR product. The flow cytometry method using the novel  
CC bead-sets can also be used in quantitative and qualitative assay of  
CC illicit or therapeutic drugs, antigens, auto antibodies, analytes  
CC commonly elevated during pregnancy or nucleic acids, epitope screening of  
CC a monoclonal antibody and for detecting specific gene mutations  
XX SQ Sequence 18 BP; 1 A; 7 C; 2 G; 8 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 18;

Best Local Similarity 88.2%; Pred. No. 3.6e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1489 CCTGGAGAAATGGAGA 1505  
||||||| |  
Db 17 CCTGGAGAGAGGAGA 1

RESULT 4504  
AAX71708/c  
ID AAX71708 standard; RNA; 18 BP.  
XX AC AAX71708;  
XX DT 28-JUL-1999 (first entry)  
XX DE Human KDR VEGF receptor hairpin ribozyme substrate #6.  
XX KW Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;  
KW KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;  
KW tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;  
KW fms-like tyrosine kinase 1; kinase insert domain containing receptor;  
KW foetal liver kinase 1; ss.  
XX OS Homo sapiens.  
XX PN WO9715662-A2.  
XX PD 01-MAY-1997.  
XX PF 25-OCT-1996; 96WO-US017480.  
XX PR 26-OCT-1995; 95US-0005974P.  
PR 11-JAN-1996; 96US-00584040.  
XX PA (RIBO-) RIBOZYME PHARM INC.  
PA (CHIR ) CHIRON CORP.  
XX PI Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;  
XX WPI; 1997-259017/23.  
XX DR Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA  
PT stability - useful for treating e.g. tumour angiogenesis, psoriasis,  
PT rheumatoid arthritis, etc., in a human patient.  
XX PS Claim 4; Page 118; 218pp; English.  
XX CC The present invention describes nucleic acid molecules which modulate the  
CC synthesis, expression and/or stability of a mRNA encoding 1 or more  
CC receptors of vascular endothelial growth factor (VEGF). A patient  
CC (preferably human) having a condition associated with the level of the  
CC fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing  
CC receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour  
CC angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be  
CC treated by administering the nucleic acid molecule or the expression  
CC vector to the patient. AAX67275 to AAX75752 represent specific examples  
CC of nucleic acid molecules from the present invention  
XX SQ Sequence 18 BP; 5 A; 4 C; 2 G; 0 T; 7 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 18;

Best Local Similarity 88.2%; Pred. No. 3.6e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2687 AAATGGAGATTGGAAT 2703  
||||||| |  
Db 18 AAATGGAGATCTGTAAT 2

RESULT 4505  
AAV13864/c  
ID AAV13864 standard; DNA; 18 BP.

XX AAV13864;  
AC  
XX 26-MAY-1998 (first entry)  
DT  
XX  
DE Oligonucleotide-cyclopropapyrroloindole conjugate.  
KW  
XX  
KW sequence specific hybridisation; cyclopropapyrroloindole conjugate; ss.  
XX  
OS Synthetic.  
XX  
FH Key Location/Qualifiers  
FT modified\_base 1  
FT /\*tag= a  
FT /note= "2-(acetyl-6-aminohexanoyl)-1,2,8,8a-tetrahydro-7  
FT -methylcyclopropa[c]pyrrolo[3,2-e] indol-4(5)-one is  
FT attached to this base via a phosphorothioate linkage"  
XX  
PN US5659022-A.  
XX  
XX 19-AUG-1997.  
PD  
XX  
XX 05-JAN-1996; 96US-00583435.  
PF  
XX  
PR 05-JAN-1996; 96US-00583435.  
XX  
XX (EPOC-) EPOCH PHARM INC.  
PA  
XX  
XX Meyer RB, Gall A, Gamper HB, Kutyavin IV, Lukhtanov EA;  
PI  
XX WPI; 1997-433902/40.  
DR  
XX  
XX Oligo:nucleotide-cyclopropa:pyrrolo:indole conjugates - are sequence-  
PT specific agents for attachment to nucleic acids useful for gene-mapping  
PT and as diagnostic and therapeutic agents.  
XX  
XX Disclosure; Col 13; 14pp; English.  
PS  
XX  
CC The invention relates to covalently linked conjugates between an  
CC oligonucleotide (ODN) and a cross-linking agent, in which the ODN  
CC possesses a sequence which is complementary to a target sequence in a  
CC nucleic acid. The conjugates are of general formula R-Linker-[X-  
CC (P=O)(Y)]q-ODN, in which: q = 0 or 1; the X-(P=O)(Y) - group is attached  
CC at the 3' and/or 5' end of the ODN; X = O or S; Y = O-, S- or CH3; ODN =  
CC an oligomer of 3-500 nucleotide units in which (1) the sugar moieties  
CC attached to the heterocyclic bases are independently beta-2-  
CC deoxyribofuranose or beta-2-OR'-ribofuranose moieties, (2) the  
CC internucleotide linkages optionally include phosphorothioate and/or  
CC methylphosphonate linkages and (3) the ODN optionally has covalently  
CC attached to it an intercalator group, a reporter group, a lipophilic  
CC group or a minor groove binder; R' = 1-5C alkyl or 2-5C alkenyl; Linker =  
CC a divalent moiety of 2-30 atoms in length; R = a specified cyclopropa-  
CC pyrroloindole (CPI) or analogue group; provided that when q = 0 then the  
CC linker group is attached to the 5-position of a uracil or to the 8-  
CC position of a purine base of a 5' or 3' terminal nucleotide of the ODN.  
CC The conjugates are able to bind reversibly to specific target sequences  
CC in DNA or RNA strands via the ODN moiety, whereupon the CPI group is able  
CC to alkylate and covalently link to N atoms in the bases of the nucleic  
CC acids. The presence of the ODN section significantly improves the  
CC efficiency of the alkylation reaction. The conjugates are useful as  
CC diagnostic and analytical tools, especially for gene mapping, and as  
CC therapeutic agents for the inhibition of viral RNA replication  
XX  
SQ Sequence 18 BP; 4 A; 3 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 18;  
Best Local Similarity 88.2%; Pred. No. 3.6e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 165 CCATGTTGTGGAATA 181  
|||||  
Db 17 CCATGTTGTGCAAAA 1

RESULT 4506  
AAX63292/c  
ID AAX63292 standard; RNA; 18 BP.  
XX  
AC AAX63292;  
XX  
DT 16-JUL-1999 (first entry)  
XX  
DE Delta-9 desaturase hairpin ribozyme substrate SEQ ID NO:1167.  
XX  
KW Maize; corn; Zea mays; delta-9 desaturase; GBSS; target; substrate;  
KW granule bound starch synthase; hammerhead ribozyme; hairpin ribozyme;  
KW modulation; gene expression; transgenic plant; cleavage; canola plant;  
KW caffeine synthesis; coffee plant; nicotine production; tobacco;  
KW fruit ripening; flower pigmentation; lignin production; ss.  
XX  
OS Zea mays.  
XX  
XX WO9710328-A2.  
PN  
XX  
PD 20-MAR-1997.  
XX  
XX 12-JUL-1996; 96WO-US011689.  
PF  
XX  
PR 13-JUL-1995; 95US-0001135P.  
XX  
XX (RIBO-) RIBOZYME PHARM INC.  
PA  
PA (DOWC ) DOWELANCO.  
XX  
XX Zwick MG, Edington BE, Mcswiggen JA, Merlo PAO, Guo L, Skokut TA;  
PI Young SA, Folkerts O, Merlo DJ;  
PI  
XX WPI; 1997-202224/18.  
DR  
XX  
XX Ribozyme which modulates plant gene expression - preferably modulates  
PT expression of DELTA-9 desaturase or granule bound starch synthase in  
PT maize or canola.  
PT  
XX Claim 40; Page 93; 155pp; English.  
PS  
XX  
CC The present invention describes an enzymatic nucleic acid molecule (I)  
CC with RNA cleaving activity, which modulates the expression of a plant  
CC gene. Also described is a gene comprising a cDNA sequence encoding maize  
CC Delta-9 desaturase. (I) can be used to modulate expression of a gene,  
CC preferably Delta-9 desaturase or a granule bound starch synthase (GBSS)  
CC gene, in a plant (preferably a maize or canola plant). (I) can be used to  
CC modulate caffeine synthesis in a coffee plant, nicotine production in a  
CC tobacco plant, fruit ripening processes in an apple, tomato, pear, plum  
CC or peach plant, flower pigmentation in a rose, petunia, chrysanthemum or  
CC marigold plant or lignin production in a tobacco, aspen, poplar or pine  
CC plant  
XX  
SQ Sequence 18 BP; 1 A; 11 C; 6 G; 0 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 18;  
Best Local Similarity 88.2%; Pred. No. 3.6e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 51 GCGCGCGGGCGCGGC 67  
|||||  
Db 18 GCTGCGGCGCGCGGC 2

RESULT 4507  
AAT98144/c  
ID AAT98144 standard; DNA; 18 BP.  
XX  
AC AAT98144;  
XX  
DT 13-MAR-1998 (first entry)  
XX  
DE Primer V-alpha(16) for T-cell receptor alpha chain variable region.



XX KW Antibody; T-cell receptor; beta chain; human immunodeficiency virus; HIV;  
KW blood; attenuation; primer; PCR; amplification; variable region;  
KW constant region; TCR; ss.  
XX OS Synthetic.  
OS Homo sapiens.  
XX PN US5665355-A.  
XX 09-SEP-1997.  
XX 07-JUN-1995; 95US-00488212.  
XX 09-NOV-1992; 92US-00973485.  
PR 18-OCT-1994; 94US-00408011.  
XX (CONS-) CONSORZIO BIOTECNOLOGIE.  
XX PA Primi D;  
XX WPI; 1997-456759/42.  
XX Removal of T-cell receptor-specific antibody from blood of HIV-infected  
PT person - by extracorporeal blood treatment, to attenuate or avert  
PT development of AIDS from HIV infection.  
XX Example 1; Col 11; 43pp; English.  
XX The invention relates to a method for removing an antibody specific for  
CC TCR-V beta (T-cell receptor V beta protein) from an HIV-infected person  
CC by removing blood from the person, removing the antibody from the blood,  
CC and reintroducing the blood into the person, thus allowing attenuation or  
CC aversion of immunodeficiency. The primers AAT98100-T98150 are used to  
CC check the efficiency of removal by detecting expression of the TCR-V-beta  
CC and V-alpha genes in a blood sample after treatment. This primer is  
CC targetted to the variable region sequence of the alpha chain gene and can  
CC be used in the amplification with primers AAT98148 or AAT98149  
XX Sequence 18 BP; 3 A; 7 C; 2 G; 6 T; 0 U; 0 Other;  
SQ Query Match 0.5%; Score 13.8; DB 1; Length 18;  
Best Local Similarity 88.2%; Pred. No. 3.6e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 793 TCAGAAGGAGCTGTGG 809  
Db ||||| ||||| ||  
17 TCAGAAGGAAGTGGAGG 1  
RESULT 4508  
AAV54725/c  
ID AAV54725 standard; DNA; 18 BP.  
XX AAV54725;  
AC AAV54725;  
XX 30-OCT-1998 (first entry)  
DT Primer used to detect integration of bGH into Mt-1 rPRL.  
XX Methallothionein-1 promoter; Mt-1; rat; prolactin; rPRL; transgene;  
DE lactogenic; somatogenic receptor; LSR; phenotypic change;  
KW over-expression; growth hormone; bovine; PCR primer; ss.  
XX Synthetic.  
OS Rattus sp.  
OS WO9835989-A1.  
PN 20-AUG-1998.  
XX 13-FEB-1998; 98WO-SE000266.  
PF XX

PR 14-FEB-1997; 97SE-00000527.  
PR 26-FEB-1997; 97US-0039549P.  
XX (TOER/) TOERNELL J.  
PA (KIND/) KINDBLOM J.  
PA (WENN/) WENNBLO H.  
PA (ISAK/) ISAKSSON O.  
PA (NORS/) NORSTEDT G.  
XX Toernell J, Kindblom J, Wennbo H, Isaksson O, Norstedt G;  
WPI; 1998-467169/40.  
XX Identifying small molecules that interact with hormone receptors - by  
PT using transgenic animal cells, used to identify agents potentially useful  
PT for treating prostatic hypertrophy, breast cancer or acromegaly.  
XX Example 1; Page 5; 26pp; English.  
XX The present PCR primer, together with AAV54723, was used to detect the  
CC integration of the bovine growth hormone gene into the methallothionein-1  
CC promoter (Mt-1) rat prolactin (rPRL) transgene. The specification  
CC describes screening and identification of low molecular weight compounds  
CC that interact with lactogenic/somatogenic receptors (LSR). The method  
CC uses in vitro cultures, organs of primary, immortalised or transfected  
CC cells from non-human transgenic animals that over-express LSR. The method  
CC is used to identify compounds that influence phenotypic changes induced  
CC by over-expression of lactogenic/somatogenic hormones (LSH), specifically  
CC prolactin, or LSR. These compounds are potentially useful in human  
CC treatments  
XX Sequence 18 BP; 6 A; 5 C; 5 G; 2 T; 0 U; 0 Other;  
SQ Query Match 0.5%; Score 13.8; DB 1; Length 18;  
Best Local Similarity 88.2%; Pred. No. 3.6e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 837 TCTGCTCAGTCCCTGGA 853  
Db ||||| ||||| |||||  
18 TGTTCAGTCCCTGGA 2  
RESULT 4509  
AAV16008  
ID AAV16008 standard; DNA; 18 BP.  
XX AAV16008;  
AC AAV16008;  
XX 21-MAY-1998 (first entry)  
DT PCR primer D-R used to identify Sox-3 gene mutations in mice.  
XX Mutation; Sox-3; ENU mutagenesis; mutational screening; recessive;  
KW single strand conformation polymorphism; SSCP; phenotypic alteration;  
KW PCR primer; amplify; ss.  
XX Synthetic.  
OS Mus sp.  
OS WO9744485-A1.  
PN 27-NOV-1997.  
XX 16-MAY-1997; 97WO-GB001354.  
XX 17-MAY-1996; 96GB-00010355.  
PR (HEXA-) HEXAGEN TECHNOLOGY LTD.  
XX Goodfellow PN;  
XX WPI; 1998-018536/02.  
XX

PT Identification of mutation(s) in genes of interest - without prior  
PT observation of phenotypic alteration in the mutated organism or cell.  
XX  
PS Example 4; Page 41; 66pp; English.  
XX  
CC PCR primers AAV16001-18 were used to identify mutations in Sox-3 using  
CC the method of the invention. The primers are located throughout the gene  
CC and are unique to Sox-3. The method comprises testing a nucleic acid  
CC sample from a mutated organism for a mutation in a gene of interest  
CC without the prior observation of a phenotypic alteration in the mutated  
CC organism resulting from the mutation. Sox-3 is a member of the Sox gene  
CC family, a family of about 20 genes which all encode a "HMG" box, which is  
CC a DNA-binding domain. Mice were mutagenised using ENU mutagenesis. The  
CC mutagenised mice were tested by PCR with each primer set and fluorescent  
CC single strand conformation polymorphism (SSCP), which identifies mice  
CC carrying mutations in Sox-3. The method provides mutational screening  
CC based on genomic and genetic techniques rather than on phenotypic  
CC observation. The method identifies and characterises genes via  
CC mutagenesis to identify genes encoding products which may have  
CC therapeutic benefit. The method also identifies the presence of mutations  
CC in a gene which do not rely solely upon prior matching of a gene with a  
CC disease. Heterozygotic organisms can also be screened to identify those  
CC carrying a mutation in a copy of a gene of interest even though the gene  
CC may be recessive and therefore causes no phenotypic alteration  
XX  
SQ Sequence 18 BP; 1 A; 6 C; 11 G; 0 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 18;  
Best Local Similarity 88.2%; Pred. No. 3.6e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 51 GCGGCGGGGGGCGGCGGC 67  
Db 1 GCGGCGGCGACGCGGC 17  
  
RESULT 4510  
AAX85987/C  
ID AAX85987 standard; DNA; 18 BP.  
XX  
AC AAX85987;  
XX  
DT 13-SEP-1999 (first entry)  
XX  
DE PCR primer used to amplify T cell receptor Va region cDNA.  
XX  
KW Acquired immune deficiency syndrome; free antibody; paratope; epitope;  
KW T cell receptor variable beta region; TCR-V beta region; binding agent;  
KW CD4+ T cell; HIV; PCR primer; ss.  
XX  
OS Synthetic.  
OS Homo sapiens.  
XX  
PN US5928642-A.  
XX  
PD 27-JUL-1999.  
XX  
PF 18-OCT-1994; 94US-00408011.  
XX  
PR 09-NOV-1992; 92US-00973485.  
XX  
PA (CONS-) CONSORZIO BIOTECNOLOGIE.  
XX  
PI Primi D;  
XX  
DR WPI; 1999-429481/36.  
XX  
PT Diagnosis and treatment of acquired immune deficiency syndrome.  
PS Disclosure; Col 57; 42pp; English.  
XX  
CC The specification describes a method for the diagnosis and treatment of  
CC acquired immune deficiency syndrome, in a person having free antibodies

CC which have a paratope capable of binding to an epitope of a T cell  
CC receptor variable beta (TCR-V beta) region. The method comprises  
CC administering a binding agent homologous with the TCR-V beta epitope. The  
CC binding agent is useful in assays for detecting various CD4+ T cell  
CC subpopulations which carry particular V beta components. The binding  
CC agent is also useful in the treatment of people infected with HIV where  
CC it is able to remove an antibody able to bind with an epitope on a TCR-V  
CC beta cell in the blood of an infected person. The present PCR primer is  
CC used to amplify the TCR Va region, in the course of the invention  
XX  
SQ Sequence 18 BP; 3 A; 7 C; 2 G; 6 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 18;  
Best Local Similarity 88.2%; Pred. No. 3.6e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 793 TCAGAAGGAGCTGGTGG 809  
Db 17 TCAGAAGGAACTGGAGG 1  
  
RESULT 4511  
AAZ25592  
ID AAZ25592 standard; DNA; 18 BP.  
XX  
AC AAZ25592;  
XX  
DT 21-DEC-1999 (first entry)  
XX  
DE Human RhoG antisense phosphorothioate oligonucleotide #33.  
XX  
KW Human; RhoG; inhibition; antisense; phosphorothioate; expression; GTPase;  
KW mitosis; mitogen; DNA synthesis; cell cycle; cancer;  
KW dynamic organisation; actin cytoskeleton; ras-mediated transformation;  
KW diagnosis; ss.  
XX  
OS Synthetic.  
OS Homo sapiens.  
XX  
FH Key Location/Qualifiers  
FT modified\_base 1..18  
FT /\*tag= a  
FT /note= "phosphorothioate linkages"  
XX  
PN US5965370-A.  
XX  
PD 12-OCT-1999.  
XX  
PF 25-SEP-1998; 98US-00161015.  
XX  
PR 25-SEP-1998; 98US-00161015.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Cowsert LM;  
XX  
DR WPI; 1999-579906/49.  
XX  
PT Antisense oligonucleotides useful for inhibiting the expression of the  
PT human RhoG gene.  
XX  
PS Example 15; Col 27; 24pp; English.  
XX  
CC AAZ25553 to AAZ25582 represent specifically claimed antisense  
CC oligonucleotides targeted to, and capable of inhibiting the expression of  
CC nucleic acids encoding human RhoG. RhoG is a member of the Rho subfamily  
CC of small GTPases the expression of which is associated with the induction  
CC of mitosis by mitogens. RhoG is thought to be required for entry into the  
CC DNA synthesis step of the cell cycle. It also effects the dynamic  
CC organisation of the actin cytoskeleton which regulates changes during  
CC cell cycle progression (e.g. cell rounding and pinching off during  
CC mitosis) and with determining the density to which cells will proliferate  
CC (RhoG affects an actin-dependent signal transduction pathway mediating

CC the level of contact inhibition through surface signals). Additionally,  
CC RhoG is associated with the development of cancers (RhoG participates in  
CC a signalling pathway involving ras-mediated transformation). Antisense  
CC compounds from the present invention may be used for inhibiting the  
CC expression of human RhoG in cells and tissues in vitro and may be used  
CC diagnostically to determine the role of RhoG in various biochemical  
CC pathways (e.g. its role in mitosis, the organisation of the actin  
CC cytoskeleton and in cancer development). AAZ25590 to AAZ25599 represent  
CC more human RhoG antisense oligonucleotides, but they do not inhibit RhoG  
CC as strongly as the specifically claimed sequences

XX SQ Sequence 18 BP; 9 A; 2 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 18;  
Best Local Similarity 88.2%; Pred. No. 3.6e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1498 AATGGAGAAACACAGGA 1514  
Db 2 AATGGAGAAACAGATGA 18  
|||||

RESULT 4512  
AAX88163/c  
ID AAX88163 standard; DNA; 18 BP.

XX AC AAX88163;

XX DT 09-SEP-1999 (first entry)

XX DE T cell receptor alpha chain primer V-alpha16.

XX KW T cell receptor; beta chain; primer; antibody; paratope; AIDS; vaccine;  
XX KW epitope; TCR-V beta; immunogenic; anti-idiotypic; antiviral; detection;  
XX KW CD4+ cell subpopulation; acquired immune deficiency syndrome; ss.

XX OS Synthetic.

XX PN US5925513-A.

XX PD 20-JUL-1999.

XX PF 07-JUN-1995; 95US-00488209.

XX PR 09-NOV-1992; 92US-00973485.  
XX PR 18-OCT-1994; 94US-00408011.

XX PA (CONS-) CONSORZIO BIOTECNOLOGIE.

XX PI Primi D;

XX DR WPI; 1999-418267/35.

XX PT Diagnosis and treatment of acquired immune deficiency syndrome onset.

XX PS Example 1; Col 11-12; 42pp; English.

XX CC This invention describes novel method for binding free antibodies having  
CC a paratope specific to an epitope on a T cell receptor (TCR-V beta) while  
CC providing an immunogenic substance able to raise anti-idiotypic  
CC antibodies which bind to free antibodies bound at the same paratope  
CC specific to the epitope on the TCR-V beta and introducing this into a  
CC person to raise anti-idiotypic antibodies. The products of the invention  
CC have antiviral activity and can be used in vaccines. The specific  
CC antibody binding affinities are useful in assays which detect the  
CC presence of CD4+ cell subpopulations carrying particular V beta  
CC components of the TCR-V beta in people infected with acquired immune  
CC deficiency syndrome (AIDS). AAX88119-X88169 represents primers used in  
CC the method of the invention

XX SQ Sequence 18 BP; 3 A; 7 C; 2 G; 6 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 18;

Best Local Similarity 88.2%; Pred. No. 3.6e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 793 TCAGAAGGAGCTGGTGG 809  
Db 17 TCAGAAGGAACCTGGAGG 1  
|||||

RESULT 4513  
AAX90266

XX ID AAX90266 standard; DNA; 18 BP.

XX AC AAX90266;

XX DT 27-SEP-1999 (first entry)

XX DE DQA1 gene PCR primer DQA4102 A strand.

XX KW Monoclonal antibody; epitope; multiplexed analysis; diagnosis;  
XX KW genetic analysis; flow cytometry; human myelin basic protein; MBP;  
XX KW microbial antigen; viral antigen; pathological condition; PCR primer; ss.

XX OS Synthetic.

XX PN WO9936564-A1.

XX PD 22-JUL-1999.

XX PF 15-JAN-1999; 99WO-US000918.

XX PR 16-JAN-1998; 98US-00008387.

XX PA (LUMI-) LUMINEX CORP.

XX PI Chandler VS, Fulton JR, Chandler MB;

XX DR WPI; 1999-444409/37.

XX PT Beadset for simultaneous detection of many analytes by flow cytometry,  
XX PT e.g. for detecting antigens, antibodies, or nucleic acid mutations.

XX PS Example; Page 102; 301pp; English.

XX CC The present invention describes a beadset (A), able to detect many  
XX CC analytes (I) in a single sample by flow cytometry (FC). (A) is produced  
XX CC by: (i) providing many subsets of beads which, within each subset, are  
XX CC homogeneous as regards at least 3 selected class parameters (C) but  
XX CC sufficiently different in at least one C from beads in other subsets to  
XX CC provide a profile of C values unique for each subset in FC; (ii) coupling  
XX CC the beads in each subset with a reactant (R), specific for a given (I)  
XX CC and (iii) mixing the subsets to form an (A) in which subsets (and thus  
XX CC bound R) are identifiable in FC from the unique profile of C. A method of  
XX CC flow cytometry analysis using (A) is used to detect a very wide range of  
XX CC (I), e.g. microbial or viral antigens (particularly from pathogens that  
XX CC cause venereal, pulmonary or gastrointestinal disease); therapeutic or  
XX CC illicit drugs; antigens or antibodies associated with particular  
XX CC pathological conditions (malignancy, allergy, autoimmune disease, blood-  
XX CC borne viruses or cardiovascular disease); hormones, including those  
XX CC indicative of pregnancy; enzymes; immunoglobulins (Ig), particularly of  
XX CC different (sub)classes; Ig that form part of a particular epitope  
XX CC (specifically an epitope of human immune deficiency virus) or nucleic  
XX CC acids (particularly for detecting a wide variety of mutations, e.g. those  
XX CC present in the ret proto-oncogene, the low density lipoprotein receptor,  
XX CC the Duchenne muscular dystrophy, angiotensin p53, and Rb genes. The  
XX CC process is particularly used for diagnosis of disease and for genetic  
XX CC analysis. The present sequence represents a DQA gene PCR primer used in  
XX CC the exemplification of the present invention

XX SQ Sequence 18 BP; 8 A; 2 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 18;  
Best Local Similarity 88.2%; Pred. No. 3.6e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;



QY	1489	CCTGGAGAAAATGGAGA	1505	
Db	2	CCTGGAGAGAAGGAGA	18	
RESULT 4514				
AAX90267/C				
ID	AAX90267	standard; DNA; 18 BP.		
XX				
AC	AAX90267;			
XX				
DT	27-SEP-1999	(first entry)		
XX				
DE	DQA1	gene PCR primer DQA4102 B strand.		
XX				
KW	Monoclonal antibody; epitope; multiplexed analysis; diagnosis;			
KW	genetic analysis; flow cytometry; human myelin basic protein; MBP;			
KW	microbial antigen; viral antigen; pathological condition; PCR primer; ss.			
XX				
OS	Synthetic.			
XX				
PN	WO9936564-A1.			
XX				
PD	22-JUL-1999.			
XX				
PF	15-JAN-1999;	99WO-US0000918.		
XX				
PR	16-JAN-1998;	98US-00008387.		
XX				
PA	(LUMI-) LUMINEX CORP.			
XX				
PI	Chandler VS,	Fulton JR, Chandler MB;		
XX				
DR	WPI; 1999-444409/37.			
XX				
PT	Beadset for simultaneous detection of many analytes by flow cytometry,			
PT	e.g. for detecting antigens, antibodies, or nucleic acid mutations.			
XX				
PS	Example; Page 102; 301pp; English.			
XX				
CC	The present invention describes a beadset (A), able to detect many			
CC	analytes (I) in a single sample by flow cytometry (FC). (A) is produced			
CC	by: (i) providing many subsets of beads which, within each subset, are			
CC	homogeneous as regards at least 3 selected class parameters (C) but			
CC	sufficiently different in at least one C from beads in other subsets to			
CC	provide a profile of C values unique for each subset in FC; (ii) coupling			
CC	the beads in each subset with a reactant (R), specific for a given (I)			
CC	and (iii) mixing the subsets to form an (A) in which subsets (and thus			
CC	bound R) are identifiable in FC from the unique profile of C. A method of			
CC	flow cytometry analysis using (A) is used to detect a very wide range of			
CC	(I), e.g. microbial or viral antigens (particularly from pathogens that			
CC	cause venereal, pulmonary or gastrointestinal disease); therapeutic or			
CC	illicit drugs; antigens or antibodies associated with particular			
CC	pathological conditions (malignancy, allergy, autoimmune disease, blood-			
CC	borne viruses or cardiovascular disease); hormones, including those			
CC	indicative of pregnancy; enzymes; immunoglobulins (Ig), particularly of			
CC	different (sub)classes; Ig that form part of a particular epitope			
CC	(specifically an epitope of human immune deficiency virus) or nucleic			
CC	acids (particularly for detecting a wide variety of mutations, e.g. those			
CC	present in the ret proto-oncogene, the low density lipoprotein receptor,			
CC	the Duchenne muscular dystrophy, angiotensin p53, and Rb genes. The			
CC	process is particularly used for diagnosis of disease and for genetic			
CC	analysis. The present sequence represents a DQA gene PCR primer used in			
CC	the exemplification of the present invention			
XX				
SQ	Sequence 18 BP; 1 A; 7 C; 2 G; 8 T; 0 U; 0 Other;			
Query Match	0.5%;	Score 13.8;	DB 1;	Length 18;
Best Local Similarity	88.2%;	Pred. No. 3.6e+03;		
Matches	15;	Conservative	0;	Mismatches 2;
			Indels	0;
			Gaps	0;
QY	1489	CCTGGAGAAAATGGAGA	1505	
Db	2	CCTGGAGAGAAGGAGA	18	
RESULT 4515				
AAD00540				
ID	AAD00540	standard; DNA; 18 BP.		
XX				
AC	AAD00540;			
XX				
DT	29-AUG-2000	(first entry)		
XX				
DE	Human	adenine nucleotide translocator ANT3 antisense strand primer #1.		
XX				
KW	Human; adenine nucleotide translocator; ANT3; mitochondria; ADP; ATP;			
KW	adenosine di-phosphate; adenosine tri-phosphate; apoptosis; MPT; cancer;			
KW	mitochondrial permeability transition; neuroprotective; nootropic;			
KW	antiParkinsonian; cytotstatic; antidiabetic; anticonvulsant; neuroleptic;			
KW	antipsoriatic; cerebroprotective; therapeutic; screening; psoriasis;			
KW	Alzheimer's disease; Parkinson's disease; Huntington's disease; dystonia;			
KW	diabetes; Leber's hereditary optic neuropathy; schizophrenia; MELAS;			
KW	mitochondrial encephalopathy; lactic acidosis; stroke; MIDD;			
KW	mitochondrial diabetes and deafness; hyperproliferative disorder;			
KW	myoclonic epilepsy red ragged fibre syndrome; antisense; primer; ss.			
XX				
OS	Homo sapiens.			
XX				
XX	WO200026370-A2.			
PN				
XX				
PD	11-MAY-2000.			
XX				
PF	03-NCV-1999;	99WO-US025883.		
XX				
PR	03-NCV-1998;	98US-00185904.		
PR	08-SEP-1999;	99US-00393441.		
XX				
PA	(MITO-) MITOKOR.			
XX				
PI	Anderson CM,	Davis RE, Clevenger W, Wiley SE, Miller SW;		
PI	Szabo TR,	Ghosh SS;		
XX				
DR	WPI; 2000-365619/31.			
XX				
PT	Recombinant construct encoding adenine nucleotide translocator			
PT	polypeptide, useful e.g. in screening for potential therapeutic agents			
PT	against mitochondrial disease.			
XX				
PS	Example 3; Page 79; 175pp; English.			
XX				
CC	The patent discloses a method to produce adenine nucleotide translocator			
CC	(ANT) proteins or ANT fusion proteins using recombinant expression			
CC	constructs. ANT is a nuclear encoded protein and a major component of			
CC	inner mitochondrial membrane. It mediates transport of adenosine di/tri-			
CC	phosphates across the mitochondrial inner membrane and also serves as an			
CC	important molecular component of the mitochondrial permeability			
CC	transition pore, a modulator of apoptosis. ANT is used to identify agents			
CC	or ligands that bind to, or interact with it. The ANT ligands are used to			
CC	detect or isolate ANT in a biological sample, and therapeutically for			
CC	regulating mitochondrial pore activity, for treating diseases associated			
CC	with altered mitochondrial function, including Alzheimer's, Parkinson's			
CC	and Huntington's diseases, cancer, psoriasis, diabetes, dystonia, Leber's			
CC	hereditary optic neuropathy, schizophrenia, mitochondrial encephalopathy,			
CC	lactic acidosis and stroke (MELAS), hyperproliferative disorders,			
CC	mitochondrial diabetes and deafness (MIDD), and myoclonic epilepsy red			
CC	ragged fibre syndrome. The present sequence is a primer derived from			
CC	antisense strand of human ANT3 coding sequence and used to determine and			
CC	confirm the authenticity of the recombinant human ANT gene sequence			
CC	present in a Baculovirus expression construct			
XX				
SQ	Sequence 18 BP; 5 A; 3 C; 5 G; 5 T; 0 U; 0 Other;			
Query Match	0.5%;	Score 13.8;	DB 1;	Length 18;
Best Local Similarity	88.2%;	Pred. No. 3.6e+03;		
Matches	15;	Conservative	0;	Mismatches 2;
			Indels	0;
			Gaps	0;
QY	1489	CCTGGAGAAAATGGAGA	1505	

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1129 TGAAGCCGAATTCCTA 1145  
||||| ||| |||||  
Db 1 TGAAGCGGAAGTTCCTA 17

RESULT 4516  
AAZ75194/c

ID AAZ75194 standard; DNA; 18 BP.  
XX  
AC AAZ75194;  
XX  
DT 10-SEP-2001 (first entry)  
XX  
DE Human biallelic marker downstream amplification primer SEQ ID NO:9550.  
KW Human genome; biallelic marker; high density disequilibrium map;  
KW genomic map; haplotype; phenotype; polymorphic base; genotyping;  
KW haplotyping; hybridisation; identification; characterisation;  
KW amplification; single nucleotide polymorphism; SNP; PCR primer;  
KW diagnosis; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO9954500-A2.  
XX  
PD 28-OCT-1999.  
XX  
PF 21-APR-1999; 99WO-IB000822.  
XX  
PR 21-APR-1998; 98US-0082614P.  
PR 23-NOV-1998; 98US-0109732P.  
XX  
PA (GEST ) GENSET.  
XX  
PI Cohen D, Blumenfeld M, Chumakov I;  
XX WPI; 2000-013267/01.  
DR  
XX Novel biallelic markers used to construct a high density disequilibrium  
PT map of the human genome.  
PT  
PS Claim 8; Page 2266; 2745pp; English.  
XX  
CC AAZ65654 to AAZ69578 represent human biallelic markers from the present  
CC invention, which contain a polymorphic base at position 24 of their  
CC nucleotide sequences. AAZ69579 to AAZ77440 represent amplification  
CC primers for the biallelic markers. The biallelic markers of the invention  
CC have a variety of uses: they can be used for high density mapping of the  
CC human genome, and in complex association studies and haplotyping studies  
CC which are useful in determining the genetic basis for disease states.  
CC Compositions and methods of the invention can also be useful for the  
CC identification of the targets for the development of pharmaceutical  
CC agents and diagnostic methods, as well as the characterisation of the  
CC differential efficacious responses to and side effects from  
CC pharmaceutical agents acting on a disease as well as other treatment.  
CC N.B. The SEQ ID NOs 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and  
CC 3367, are not actually given a sequence in the Sequence Listing from the  
CC present invention  
XX  
SQ Sequence 18 BP; 6 A; 5 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 18;  
Best Local Similarity 88.2%; Pred. No. 3.6e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 932 TGCTAAATGCCTCGTT 948  
||| ||||| |||||  
Db 17 TGGTGAATGCCTCGTT 1

RESULT 4517

AAZ43267

ID AAZ43267 standard; DNA; 18 BP.  
XX  
AC AAZ43267;  
XX  
DT 11-FEB-2000 (first entry)  
XX  
DE Murine Sox3 gene PCR primer 8.  
XX  
KW Screening; mutation; treatment; disease; drug discovery; PCR primer; ss.  
XX  
OS Mus musculus.  
XX  
PN US5994075-A.  
XX  
PD 30-NOV-1999.  
XX  
PF 16-MAY-1997; 97US-00857946.  
XX  
PR 17-MAY-1996; 96US-0017824P.  
XX  
PA (HEXA-) HEXAGEN TECHNOLOGY LTD.  
XX  
PI Goodfellow PN;  
XX  
DR WPI; 2000-038255/03.  
XX  
PT Identifying a mutation in a gene of interest in an organism useful for  
PT identifying genes encoding products which may have therapeutic benefits.  
XX  
PS Example 5; Col 63-64; 70pp; English.  
XX  
CC This invention describes a novel mutational screening method based on  
CC genomic and genetic techniques to identify and characterize a mutation in  
CC a gene of interest without first selecting a phenotypic characteristic.  
CC The screening methods are useful for identifying genes encoding products  
CC which may have therapeutic benefit for treating human or animal diseases.  
CC The method can be used for the DNA mutation screening of a class or a  
CC family of genes providing a rapid assay for identifying mutant genes. The  
CC methods produce organisms which can be used for drug discovery e.g.  
CC providing a model for the study and treatment of a disease state, allow  
CC in vitro assessment of drug activity and interbreeding of mutants which  
CC allow investigation of gene interactions in the overall phenotype. A  
CC range of phenotypes associated with different mutations, and specified  
CC mutations in a gene of interest can be determined. The method can be  
CC adapted to screen for a mutation in two or more genes of interest in an  
CC organism. The methods allow mutations in a gene of interest to be  
CC identified without having to rely on matching a gene with a disease.  
CC AAZ43260-Z43421 represent PCR primers used in the method of the invention  
XX  
SQ Sequence 18 BP; 1 A; 6 C; 11 G; 0 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 18;  
Best Local Similarity 88.2%; Pred. No. 3.6e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 51 GCGGCGGGCGGCGGC 67  
||||| ||||| |||||  
Db 1 GCGGCGGCGACGCGGC 17

RESULT 4518  
AAA05252

ID AAA05252 standard; DNA; 18 BP.  
XX  
AC AAA05252;  
XX  
DT 19-MAY-2000 (first entry)  
XX  
DE PCR primer D-R used in Sox-3 ampilmer generation.  
XX  
KW PCR primer; Sox-2; Sox-3; T gene; Tyrosinase; MGF; Sry; c-kit; Tryp-1;  
KW Pax-6; mutation detection; therapeutic target identification; mouse;

KW mast cell growth factor; ss.  
XX  
OS Mus sp.  
XX  
PN US6015670-A.  
XX  
PD 18-JAN-2000.  
XX  
XX 14-NOV-1997; 97US-00970740.  
PF 17-MAY-1996; 96US-0017824P.  
PR 16-MAY-1997; 97US-00857946.  
XX  
PA (HEXA-) HEXAGEN TECHNOLOGY LTD.  
XX  
XX Goodfellow PN;  
PI  
XX WPI; 2000-181139/16.  
DR  
XX Detecting mutations in selected genes, useful e.g. for identifying  
PT therapeutic targets or products, by analyzing DNA in mutated embryonic  
PT stem cells without phenotypic characterization.  
PT  
XX Example 5; Col 31; 66pp; English.  
PS  
XX PCR primers AAA05245-A05406 are used to generate ampimers from the mouse  
CC Sox-3 gene, Sox-2 gene, T gene, tyrosinase gene, Tryp-1 gene, Sry gene,  
CC MGF (mast cell growth factor) gene, c-kit gene, and the Pax-6 gene. The  
CC primers are used in a method for the identification of a mutation in a  
CC selected gene in a tissue without the prior observation of a phenotypic  
CC alteration in the mutated organism or cell. The method is used to  
CC identify mutations in a selected gene that encode products of potential  
CC therapeutic activity or that are potential targets, particularly where  
CC the gene of interest has been identified as a candidate gene by  
CC positional cloning. Other applications are determining functions of genes  
CC ; detecting the range of phenotypes associated with different mutations  
CC in a particular gene and identification of particular mutations. Animals  
CC containing an identified mutation are used as models for studying  
CC diseases or their treatment, and cells from them for in vitro assessment  
CC of drug action. Interbreeding of mutant mice is used to investigate  
CC genetic interaction in the overall phenotype  
XX  
SQ Sequence 18 BP; 1 A; 6 C; 11 G; 0 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 18;  
Best Local Similarity 88.2%; Pred. No. 3.6e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 51 GCGGCGGGGGCGGCGGC 67  
Db 1 GCGGCGGCGACGGCGGC 17  
  
RESULT 4519  
AAZ93440/C  
ID AAZ93440 standard; DNA; 18 BP.  
XX  
AC AAZ93440;  
XX 24-JUL-2000 (first entry)  
XX  
XX TRADD antisense oligonucleotide.  
DE  
XX  
XX TRADD; TNF; tumour necrosis factor; NF-kappa-B; apoptosis;  
KW programmed cell death; antisense; inhibition; treatment; therapy;  
KW septic shock; inflammation; cancer; antiinflammatory; human; ss.  
XX  
OS Synthetic.  
XX  
XX Key Location/Qualifiers  
FH complement(1. .18)  
FT /\*tag= a  
FT /note= "Complementary to bases 57-40 of the human TRADD

FT sequence described in GENESEQ record AAZ93431"  
XX  
XX WO200012527-A1.  
PN  
XX  
XX 09-MAR-2000.  
PD  
XX 25-AUG-1999; 99WO-US019614.  
PF  
XX 28-AUG-1998; 98US-00143212.  
PR  
XX (ISIS-) ISIS PHARM INC.  
PA  
XX Monia BP, Cowser LM;  
PI  
XX WPI; 2000-237846/20.  
DR  
XX New antisense compounds that limit the expression of human TRADD protein,  
PT useful in the treatment and diagnosis of cancer, inflammation and septic  
PT shock.  
PT  
XX Claim 3; Page 51; 85pp; English.  
PS  
XX The intracellular protein TRADD has been identified as a critical link  
CC between tumour necrosis factor (TNF) receptor binding and downstream  
CC activation of NF-kappa-B. Overexpression of native TRADD activates NF-  
CC kappa-B in the absence of TNF and dominant negative mutants of TRADD  
CC block TNF-induced NF-kappa-B activation. A second effect of TNF in many  
CC cell types is the induction of apoptosis (programmed cell death). TRADD  
CC overexpression has been shown to mimic TNF induction of apoptosis as  
CC well. Data indicates that TRADD and other downstream effector proteins  
CC are the rate limiting step of TNF action and would therefore serve as the  
CC most efficient targets for inhibition of TNF-induced events. Antisense  
CC oligonucleotides capable of inhibiting TRADD function may therefore be  
CC useful in a number of therapeutic, diagnostic and research applications.  
CC Inhibiting expression of TRADD by contacting human cells or tissues with  
CC the antisense compound may be used to treat a disease or condition  
CC associated with TRADD expression, for example, septic shock,  
CC inflammation, or cancer. TRADD antisense oligonucleotides of varying  
CC inhibitory capabilities are listed in GENESEQ records AAZ93438-Z93517.  
CC The antisense oligonucleotides exhibit enhanced inhibitory capabilities  
CC when they have 2'-MOE wings and a deoxy gap  
XX  
SQ Sequence 18 BP; 3 A; 9 C; 2 G; 4 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 18;  
Best Local Similarity 88.2%; Pred. No. 3.6e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 1191 GAAATGAGATGGCAGCT 1207  
Db 17 GAGGTGAGATGGCAGCT 1  
  
RESULT 4520  
AAZ93475  
ID AAZ93475 standard; DNA; 18 BP.  
XX  
AC AAZ93475;  
XX 24-JUL-2000 (first entry)  
DT  
XX TRADD antisense oligonucleotide.  
DE  
XX  
XX TRADD; TNF; tumour necrosis factor; NF-kappa-B; apoptosis;  
KW programmed cell death; antisense; inhibition; treatment; therapy;  
KW septic shock; inflammation; cancer; antiinflammatory; human; ss.  
XX  
OS Synthetic.  
XX  
XX Key Location/Qualifiers  
FH complement(1. .18)  
FT /\*tag= a  
FT /note= "Complementary to bases 641-624 of the human TRADD



PT XX WO200012527-A1. sequence described in GENESEQ record AAZ93431"

FN XX

XX XX

PD PD 09-MAR-2000.

XX XX

PF PF 25-AUG-1999; 99WO-US019614.

XX XX

PR PR 28-AUG-1998; 98US-00143212.

XX XX

PA (ISIS-) ISIS PHARM INC.

XX XX

PI Monia BP, Cowsert LM;

XX XX

DR WPI; 2000-237846/20.

XX XX

PT New antisense compounds that limit the expression of human TRADD protein, useful in the treatment and diagnosis of cancer, inflammation and septic shock.

PT PT

PT PT

XX XX

PS Example 15; Page 52; 85pp; English.

XX XX

CC The intracellular protein TRADD has been identified as a critical link between tumour necrosis factor (TNF) receptor binding and downstream activation of NF-kappa-B. Overexpression of native TRADD activates NF-kappa-B in the absence of TNF and dominant negative mutants of TRADD block TNF-induced NF-kappa-B activation. A second effect of TNF in many cell types is the induction of apoptosis (programmed cell death). TRADD overexpression has been shown to mimic TNF induction of apoptosis as well. Data indicates that TRADD and other downstream effector proteins are the rate limiting step of TNF action and would therefore serve as the most efficient targets for inhibition of TNF-induced events. Antisense oligonucleotides capable of inhibiting TRADD function may therefore be useful in a number of therapeutic, diagnostic and research applications. Inhibiting expression of TRADD by contacting human cells or tissues with the antisense compound may be used to treat a disease or condition associated with TRADD expression, for example, septic shock, inflammation, or cancer. TRADD antisense oligonucleotides of varying inhibitory capabilities are listed in GENESEQ records AAZ93438-Z93517. The antisense oligonucleotides exhibit enhanced inhibitory capabilities when they have 2'-MOE wings and a deoxy gap

XX XX

SQ Sequence 18 BP; 0 A; 5 C; 12 G; 1 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 18;

Best Local Similarity 88.2%; Pred. No. 3.6e+03;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 51 GCGCGGGGGCGGCGGC 67

Db 2 GTGGCGGCGGCGGCGGC 18

RESULT 4521

AAH27102

ID AAH27102 standard; DNA; 18 BP.

XX XX

AC AAH27102;

XX XX

DT 06-AUG-2001 (first entry)

XX XX

DE Heltest4 cleavage fragment.

XX XX

KW Cleavage structure; target sequence detection; flap endonuclease; FEN;

KW Heltest4; ss.

XX XX

OS Synthetic.

XX XX

PN WO200132922-A2.

XX XX

PD 10-MAY-2001.

XX XX

PF 27-OCT-2000; 2000WO-US029663.

XX XX

PR 29-OCT-1999; 99US-00430692.

XX XX

PA (STRA-) STRATAGENE.

XX XX

PI Sorge JA;

XX XX

DR WPI; 2001-328805/34.

XX XX

PT The labelling of nucleic acids for their detection and quantification comprises the formation of a cleavage structure and its cleavage with a five' exonuclease-1 or flap endonuclease-1.

PT PT

XX XX

PS Example 3; Page 22; 81pp; English.

XX XX

CC This invention relates to a method for generating a signal indicative of

XX PR 29-OCT-1999; 99US-00430692.

XX XX

PA (STRA-) STRATAGENE.

XX XX

PI Sorge JA;

XX XX

DR WPI; 2001-328805/34.

XX XX

PT The labelling of nucleic acids for their detection and quantification comprises the formation of a cleavage structure and its cleavage with a five' exonuclease-1 or flap endonuclease-1.

PT PT

XX XX

PS Example 3; Page 22; 81pp; English.

XX XX

CC This invention relates to a method for generating a signal indicative of the presence of a target nucleic acid sequence in a sample. The method comprises the formation of a cleavage structure through the incubation of a sample comprising a target nucleic acid sequence and a nucleic acid polymerase and cleaving the cleavage structure with a 5' exonuclease-1 or flap endonuclease (FEN) to generate the signal. The method is used for the detection and quantification of a target nucleic acid sequence. The present sequence represents a fragment of oligonucleotide Heltest4, which is used in an assay to evaluate the activity of a FEN endonuclease. This sequence is the fragment of Heltest4 which is cleaved off by FEN

XX XX

SQ Sequence 18 BP; 15 A; 0 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 18;

Best Local Similarity 88.2%; Pred. No. 3.6e+03;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2786 AAAAAAAAAAAAAAAAAA 2802

Db 1 AAAATAAATAAAAAAAAA 17

RESULT 4522

AAH27102/c

ID AAH27102 standard; DNA; 18 BP.

XX XX

AC AAH27102;

XX XX

DT 06-AUG-2001 (first entry)

XX XX

DE Heltest4 cleavage fragment.

XX XX

KW Cleavage structure; target sequence detection; flap endonuclease; FEN;

KW Heltest4; ss.

XX XX

OS Synthetic.

XX XX

PN WO200132922-A2.

XX XX

PD 10-MAY-2001.

XX XX

PF 27-OCT-2000; 2000WO-US029663.

XX XX

PR 29-OCT-1999; 99US-00430692.

XX XX

PA (STRA-) STRATAGENE.

XX XX

PI Sorge JA;

XX XX

DR WPI; 2001-328805/34.

XX XX

PT The labelling of nucleic acids for their detection and quantification comprises the formation of a cleavage structure and its cleavage with a five' exonuclease-1 or flap endonuclease-1.

PT PT

XX XX

PS Example 3; Page 22; 81pp; English.

XX XX

CC This invention relates to a method for generating a signal indicative of

CC the presence of a target nucleic acid sequence in a sample. The method  
CC comprises the formation of a cleavage structure through the incubation of  
CC a sample comprising a target nucleic acid sequence and a nucleic acid  
CC polymerase and cleaving the cleavage structure with a 5' exonuclease-1 or  
CC flap endonuclease (FEN) to generate the signal. The method is used for  
CC the detection and quantification of a target nucleic acid sequence. The  
CC present sequence represents a fragment of oligonucleotide Heltest4, which  
CC is used in an assay to evaluate the activity of a FEN endonuclease. This  
CC sequence is the fragment of Heltest4 which is cleaved off by FEN  
XX  
SQ Sequence 18 BP; 15 A; 0 C; 0 G; 3 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 18;  
Best Local Similarity 88.2%; Pred. No. 3.6e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 2166 TTTT TTTT TTTT TTTT TTTT 2182  
Db 17 TTTT TTTT TTTT TTTT TTTT 1  
  
RESULT 4523  
AAH56578  
ID AAH56578 standard; DNA; 18 BP.  
XX  
AC AAH56578;  
XX  
DT 06-SEP-2001 (first entry)  
XX  
DE S. pneumoniae groE operon antisense oligonucleotide SEQ ID NO:226.  
XX  
KW Antisense oligonucleotide; groE; groEL; groES; inhibitor; growth;  
KW microorganism; Escherichia coli; Streptococcus pneumoniae; diagnosis;  
KW Streptococcus pyogenes; Staphylococcus aureus; Pseudomonas aeruginosa;  
KW antibacterial; antiviral; antiproliferative; antisense therapy;  
KW microbial infection; ss.  
XX  
OS Streptococcus pneumoniae.  
XX  
PN WO200136625-A2.  
XX  
PD 25-MAY-2001.  
XX  
PF 20-NOV-2000; 2000WO-CA001347.  
XX  
PR 18-NOV-1999; 99US-0166249P.  
XX  
PA (GENE-) GENESENSE TECHNOLOGIES INC.  
XX  
XX Wright JA, Young AH, Dugourd D;  
PI  
XX  
DR WPI; 2001-355633/37.  
XX  
XX  
PT Novel antisense compounds targeting nucleic acid encoding groEL or groES  
PT gene of microorganism, which hybridize with and inhibit expression of the  
PT genes, useful to inhibit growth of microorganism having the genes.  
XX  
XX Claim 3; Page 46; 110pp; English.  
PS  
XX  
XX The present invention specifically claims AAH56368 to AAH56832 which are  
XX antisense oligonucleotides to nucleotide sequences encoding groE. More  
XX generally, antisense compounds (I) comprising antisense oligonucleotides  
XX of 5-50 bases targeted to a nucleotide sequence encoding groEL (heat  
XX shock protein (HSP)60) (GL) and groES (HSP10) (GS) gene from a  
XX microorganism, where the antisense compound is complementary to GL or GS  
XX of a microorganism and specifically hybridizes with and inhibits the  
XX expression of GL or GS, is claimed. (I) have antibacterial, antiviral and  
XX antiproliferative activities, and can be used in antisense therapy and  
XX for inhibition of expression of groES or groEL. (I) are useful for  
XX inhibiting expression of GL or GS in cells or tissues in vitro. (I) are  
XX also useful for inhibiting the growth of a microorganism, or inhibiting  
XX the expression of GL or GS gene in a microorganism (a bacterial cell or a  
XX virus) having a GL or GS gene which involves administering to the

CC microorganism or to a cell infected with the microorganism, (I) are  
CC also useful for treating a mammalian pathological condition mediated by  
CC the microorganisms which involves identifying a eukaryotic organism  
CC having a pathological condition mediated by microorganisms having a GL or  
CC GS gene and administering (I) such that the growth of microorganism is  
CC inhibited. The antisense compounds are utilised for diagnostics,  
CC therapeutics, prophylaxis and as research reagents and kits, e.g., to  
CC prevent or delay microbial infections in humans. They are also useful as  
CC molecular weight markers. AAH56362 to AAH56367 and AAH56833 to AAH56854  
CC represent PCR primers for groE sequences which are used in the  
CC exemplification of the present invention. AAH56855 to AAH56870 represent  
CC groE nucleotide sequence given in the present invention  
XX  
SQ Sequence 18 BP; 0 A; 4 C; 2 G; 12 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 18;  
Best Local Similarity 88.2%; Pred. No. 3.6e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 2162 CTCCTTTT TTTT TTTT TTTT 2178  
Db 2 CTCCTTTT TTTT TTTT TTTT 18  
  
RESULT 4524  
AAS08670  
ID AAS08670 standard; DNA; 18 BP.  
XX  
AC AAS08670;  
XX  
DT 26-SEP-2001 (first entry)  
XX  
DE BsgI-AFLP primer/MseI adapter procedure, MseI adapter, 99137/38.  
XX  
KW AFLP; 99137/38; amplified fragment length polymorphism; ds;  
KW IIS restriction endonuclease; polymorphism detection; genotyping; cancer;  
KW oncogene; high throughput detection; genetic classification;  
KW single nucleotide polymorphism.  
XX  
OS Synthetic.  
XX  
FH Key Location/Qualifiers  
FT misc\_feature 1..4  
FT /\*tag= a  
FT /label= 5' \_overhang  
FT misc\_feature 17..18  
FT /\*tag= b  
FT /label= 3' \_overhang  
XX  
PN WO200149882-A2.  
XX  
PD 12-JUL-2001.  
XX  
PF 28-DEC-2000; 2000WO-NL000963.  
XX  
PR 29-DEC-1999; 99EP-00204614.  
XX  
PA (KEYG-) KEYGENE NV.  
XX  
XX Van Eijk MJT, Hogers RCJ, Heijnen L;  
PI  
XX WPI; 2001-432889/46.  
XX  
XX Generating oligonucleotides, involves ligating a double-stranded DNA to  
PT another dsDNA comprising IIS restriction endonuclease recognition site,  
PT restricting ligated dsDNA, and detecting IIS-restricted dsDNA.  
XX  
PS Example 1; Page 32; 72pp; English.  
XX  
XX The sequence represents an MseI adapter, 99137/38, used in a protocol  
CC using an AFLP primer (amplified fragment length polymorphism) containing  
CC a BsgI site and an MseI adapter, used to demonstrate the method of the  
CC invention. The invention relates to generating an oligonucleotide,  
CC

CC involving ligating a first double-stranded DNA (dsDNA) (I) to a second  
CC dsDNA (II) comprising at least one recognition site for IIS restriction  
CC endonuclease (RE) within its sequence, restricting the ligated dsDNA with  
CC at least one RE of the IIS type to obtain IIS-restricted-(I) and -(II),  
CC and optionally detecting the obtained IIS-restricted dsDNA. The method is  
CC useful for generating and optionally detecting an oligonucleotide in a  
CC sample e.g. for identifying polymorphic markers, for classifying an  
CC individual as belonging to certain species, sub-species, variety,  
CC cultivar, race, strain or line, and for studying the inheritance of  
CC genetic traits. The method is also useful for detecting genetic markers  
CC for a disease or disorder including cancer, oncogenes and oncogenic  
CC mutations. The method is also useful for plant and animal breeding,  
CC disease diagnosis in plants and animals, identification of genetically  
CC inherited diseases in humans, family relationship analysis, forensic  
CC science, organ transplant, microbial and viral typing, as well as the  
CC study of gene inheritance, gene expression, mutations, drug resistance,  
CC and for mRNA detection. The method is also useful for high throughput  
CC detection of single nucleotide polymorphisms, quantitative analysis of  
CC DNA or its fragments, and for providing quantitative data in  
CC homozygote/heterozygote-AFLP techniques. Note: The complementary strand  
CC of the present sequence appears twice in the specification, the second  
CC time as an MseI+1 preamplification primer, 99I40. It is possible that the  
CC sequence was duplicated in error and that the genuine 99I40 sequence is  
CC missing from the specification

Sequence 18 BP; 5 A; 2 C; 7 G; 4 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 18;  
Best Local Similarity 88.2%; Pred. No. 3.6e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2655 AAGGTGAGTGTGCAGTA 2671  
Db 2 ACGATGAGTGTGCAGTA 18

RESULT 4525  
AAF94740  
ID AAF94740 standard; DNA; 18 BP.  
XX AAF94740;  
AC AAF94740;  
XX 23-MAY-2001 (first entry)  
XX Rho G antisense phosphorothioate oligonucleotide SEQ ID 164.  
DE Rho; GTP binding protein; phosphorothioate antisense oligonucleotide;  
XX RhoA; RhoB; RhoC; RhoG; Rac 1; cdc42; hyperproliferative condition;  
KW cancer; wound healing; clotting; ischaemia; reperfusion; reoxygenation;  
KW ss.  
XX Homo sapiens.  
OS WO200115739-A1.  
XX 08-MAR-2001.  
PD 18-AUG-2000; 2000WO-US022808.  
XX 31-AUG-1999; 99US-00387341.  
PR (ISIS-) ISIS PHARM INC.  
XX Roberts ML, Cowser LM;  
PI WPI; 2001-191677/19.  
XX An antisense compound targeted to a nucleic acid molecule encoding a  
PT member of the human Rho family of small GTP binding proteins useful for  
PT treating e.g. cancer and ischemia.  
XX Example 18; Page 81; 156pp; English.

CC This invention relates to an antisense compound targeted to a nucleic  
CC acid molecule encoding a member of the human Rho family of small GTP  
CC binding proteins, where the antisense compound inhibits the expression of  
CC the member of the human Rho family. The invention includes antisense  
CC oligonucleotides AAF94580 - AAF94637 which target a RhoA nucleotide  
CC sequence, AAF94645 - AAF94684 which target a RhoB nucleotide sequence,  
CC AAF94686 - AAF94725 which target a RhoC nucleotide sequence, AAF94727 -  
CC AAF94766 which target RhoG nucleotide sequence, AAF94769 - AAF94790 which  
CC target a Rac 1 nucleotide sequence and AAF94795 - AAF94809 which target  
CC cdc42 nucleotide sequence. The antisense compound is useful for treating  
CC hyperproliferative conditions, especially cancer, abnormal wound healing  
CC or clotting conditions and ischaemia/reperfusion or reoxygenation injury.  
CC The compound may also be used to diagnose the above conditions

Sequence 18 BP; 9 A; 2 C; 5 G; 2 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 18;  
Best Local Similarity 88.2%; Pred. No. 3.6e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1498 AATGGAGAAACACAGGA 1514  
Db 2 AATGGAGAAACAGATGA 18

RESULT 4526  
AAS05922  
ID AAS05922 standard; DNA; 18 BP.  
XX AAS05922;  
AC AAS05922;  
XX 07-SEP-2001 (first entry)  
DT Human ANT-3 sequencing primer #3 used for huANT3-baculovirus construct.  
DE Human; adenine nucleotide translocator-3; ANT-3; MTP; cyclophilin;  
XX mitochondrial permeability transition pore component; cell survival;  
KW mitochondrial core component; mitochondrial related disorder; cancer;  
KW Alzheimer's disease; diabetes mellitus; hyperproliferative disorder;  
KW primer; ss.  
XX Homo sapiens.  
OS WO200132876-A2.  
XX 10-MAY-2001.  
PD 03-NOV-2000; 2000WO-US030535.  
PF 03-NOV-1999; 99US-00434354.  
XX (MITO-) MITOKOR.  
XX Murphy AN, Clevenger W, Wiley SE, Andreyev AY, Frigeri LG;  
PI Velicelebi G, Davis RE;  
XX WPI; 2001-291054/30.  
DR New nucleic acid expression constructs, useful for screening for agents  
XX that alter mitochondrial permeability transition (MPT), comprises  
PT polynucleotide encoding MPT polypeptide or cyclophilin polypeptide fused  
PT to energy transfer molecule.  
XX Example 3; Page 85; 186pp; English.  
PS The present sequence for human adenine nucleotide translocator-3 (huANT-  
CC 3) sequencing primer #3 is used to sequence a huANT3-baculovirus  
CC recombinant expression construct. ANT proteins are mitochondrial  
CC permeability transition (MTP) pore components responsible for mediating  
CC transport of ADP across the mitochondrial inner membrane. ANT proteins  
CC interact with other mitochondrial core components e.g. cyclophilins to  
CC regulate MPT. The present invention relates to a novel nucleic acid  
CC expression construct comprising a promoter operably linked to a



CC polynucleotide encoding a mitochondrial pore component polypeptide (e.g.  
CC ANT) fused to an energy transfer molecule (ETM) protein (e.g. green  
CC fluorescent protein (GFP) or a FLASH sequence). The novel expression  
CC construct can alter mitochondrial membrane permeability transition and/or  
CC alter the interaction between mitochondrial core components. The methods  
CC are useful for screening for agents that alter MPT and/or cell survival.  
CC These agents are useful for the prevention or treatment of diseases  
CC associated with altered mitochondrial function or dysfunctional cell  
CC survival, such as Alzheimer's disease, diabetes mellitus, Parkinson's  
CC disease, Huntington's disease, schizophrenia, mitochondrial  
CC encephalopathy, lactic acidosis, stroke, hyperproliferative disorders  
CC e.g. cancer, and deafness  
XX  
SQ Sequence 18 BP; 5 A; 3 C; 5 G; 5 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 18;  
Best Local Similarity 88.2%; Pred. No. 3.6e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1129 TGAAGCCGGAATTCCTA 1145  
Db 1 TGAAGCCGGAATTCCTA 17  
RESULT 4527  
AAD11767/C  
ID AAD11767 standard; DNA; 18 BP.  
XX  
AC AAD11767;  
XX  
DT 24-SEP-2001 (first entry)  
XX  
DE Human AAG6 DNA exon 4.2 amplifying forward PCR primer #22.  
XX  
KW Human; asthma-associated gene; AAG6; antiinflammatory; gene therapy;  
KW obstructive airway disease; asthma; chronic bronchitis; eosinophila;  
KW adult respiratory distress syndrome; ARDS; dyspnoea; emphysema; COPD;  
KW COAD; chronic obstructive or pulmonary disease; pneumoconiosis;  
KW eosinophil related disorder; bronchopulmonary aspergillosis;  
KW Loffler's syndrome; polyarteritis nodosa; PCR primer; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO200155214-A2.  
XX  
PD 02-AUG-2001.  
XX  
PF 23-JAN-2001; 2001WO-EP000719.  
XX  
PR 25-JAN-2000; 2000US-00490616.  
XX  
PA (NOVS ) NOVARTIS AG.  
PA (NOVS ) NOVARTIS-ERFINDUNGEN VERW GES MBH.  
XX  
PI Whittaker PA, Jones SJ, Hanley MT;  
XX  
DR WPI; 2001-457719/49.  
XX  
PT Novel polypeptide AAG6 useful for treating an inflammatory or obstructive  
PT airways disease, e.g., asthma.  
XX  
PS Example 2; Page 26; 62pp; English.  
XX  
CC The invention relates to human asthma-associated gene designated as AAG6.  
CC AAG6 is used in the diagnosis, prognosis and treatment of inflammatory or  
CC obstructive airway diseases such as asthma, adult respiratory distress  
CC syndrome (ARDS), chronic obstructive or pulmonary disease (COPD or COAD),  
CC chronic bronchitis, dyspnoea, emphysema and pneumoconiosis. AAG6 is also  
CC used in the treatment of eosinophil related disorders such as  
CC eosinophila, eosinophilic pneumonia, Loffler's syndrome, bronchopulmonary  
CC aspergillosis, polyarteritis nodosa and eosinophilic granuloma. AAG6 DNA  
CC is useful in gene therapy. The present sequence is a PCR primer used for  
CC amplifying human AAG6 DNA

XX  
SQ Sequence 18 BP; 5 A; 7 C; 5 G; 1 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 18;  
Best Local Similarity 88.2%; Pred. No. 3.6e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 2633 CGTTCCTGTGGGCTGA 2649  
Db 18 CGTGCCTGTGGGCTCA 2  
RESULT 4528  
AAH91840  
ID AAH91840 standard; DNA; 18 BP.  
XX  
AC AAH91840;  
XX  
DT 09-OCT-2001 (first entry)  
XX  
DE Human inflammatory bowel disease associated polymorphic site #915.  
XX  
KW Humar; inflammatory bowel disease; Crohn's disease; ulcerative colitis;  
KW single nucleotide polymorphism; SNP; chromosome 19p13; paternity test;  
KW chromosome 5q31-33; forensic test; gene therapy; ds.  
XX  
OS Homo sapiens.  
XX  
FH Key Location/Qualifiers  
FT misc\_feature 9 /\*tag= a  
FT FT /note= "SNP, optionally T or A at this position"  
XX  
PN WO200142511-A2.  
XX  
PD 14-JUN-2001.  
XX  
PF 11-DEC-2000; 2000WO-US033632.  
XX  
PR 10-DEC-1999; 99US-0170257P.  
PR 10-APR-2000; 2000US-0196046P.  
XX  
PA (WHED ) WHITEHEAD INST BIOMEDICAL RES.  
PA (ELLI-) ELLIPSIS BIOTHERAPEUTICS CORP.  
XX  
PI Daly M, Hudson TJ, Lander ES, Rioux J, Siminovitch K;  
XX  
DR WPI; 2001-367874/38.  
XX  
PT Testing for the presence of polymorphisms associated with inflammatory  
PT bowel disease, using a hybridization assay.  
XX  
PS Claim 1; Page 77; 463pp; English.  
XX  
CC The present invention describes a method for detecting the presence of  
CC polymorphisms associated with inflammatory bowel diseases such as  
CC ulcerative colitis and Crohn's disease. The methods can be used to detect  
CC the presence of genetic polymorphisms associated with inflammatory bowel  
CC disease and correlating their occurrence with disease states. They may be  
CC used in this way for phenotypic correlations, forensics, paternity  
CC testing, medicine and genetic analysis. The present sequence is a  
CC polymorphic site described in the exemplification of the invention  
XX  
SQ Sequence 18 BP; 5 A; 2 C; 0 G; 10 T; 0 U; 1 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 18;  
Best Local Similarity 83.3%; Pred. No. 3.6e+03;  
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 2178 TTTTCTTTTAACTTTGAA 2195  
Db 1 TTTTCTTTTAACTTTGAA 18

RESULT 4529  
ABZ72262/c  
ID ABZ72262 standard; DNA; 18 BP.  
XX  
AC ABZ72262;  
XX  
DT 03-APR-2003 (first entry)  
XX  
DE Gene 216 SSCP sequencing primer SEQ ID NO 234.  
XX  
KW Human; Gene 216; chromosome 20p13-p12; antiasthmatic; anorectic;  
KW antiinflammatory; gastrointestinal; gene therapy; vaccine; asthma;  
KW obesity; inflammatory bowel disease; primer; ss.  
XX  
OS Synthetic.  
XX  
PN WO200178894-A2.  
XX  
PD 25-OCT-2001.  
XX  
PF 13-APR-2001; 2001WO-US012245.  
XX  
PR 13-APR-2000; 2000US-00548797.  
XX  
PA (GENO-) GENOME THERAPEUTICS CORP.  
XX  
PI Keith T;  
XX  
DR WPI; 2001-639428/73.  
XX  
PT Isolated genes (Gene 216) from human chromosome 20p13-p12 and the  
PT proteins they encode, useful for the prevention, diagnosis and treatment  
PT of asthma, obesity and inflammatory bowel disease.  
XX  
PS Example 10; Page 150; 520pp; English.  
XX  
CC The invention relates to isolated genes (Gene 216) from human chromosome  
CC 20p13-p12 and the proteins they encode. The nucleic acids and proteins  
CC may be used in the prevention, diagnosis and treatment of diseases  
CC associated with inappropriate Gene 216 expression. For example, the  
CC nucleic acids (or vectors) and proteins may be used to treat disorders  
CC associated with decreased expression by rectifying mutations or deletions  
CC in a patient's genome that affect the activity of gene 216 by expressing  
CC inactive proteins or to supplement the patients own production of Gene  
CC 216 proteins. Additionally, the nucleic acids may be used to produce the  
CC secreted Gene 216 protein, by inserting the nucleic acids into a host  
CC cell and culturing the cell to express the protein. The nucleic acids and  
CC complementary sequences may also be used as DNA probes in diagnostic  
CC assays to detect and quantitate the presence of similar nucleic acid  
CC sequences in samples and therefore which patients may be in need of  
CC restorative therapy. The Gene 216 protein may also be used as antigens in  
CC the production of antibodies against Gene 216 and in assays to identify  
CC modulators of Gene 216 expression and activity. The anti-Gene 216  
CC antibodies and antagonists may also be used to down regulate expression  
CC and activity. The anti-Gene 216 antibodies may also be used as diagnostic  
CC agents for detecting the presence of Gene 216 proteins in samples (e.g.  
CC by enzyme linked immunosorbant assay or ELISA). Disorders that may be  
CC prevented, diagnosed and/or treated by the above methods include, for  
CC example asthma, obesity and inflammatory bowel disease. The present  
CC sequence is that of a Gene 216 related primer used in examples of the  
CC invention. The primers are used in the physical mapping of the gene  
CC (ABZ72067-ABZ72088), polymorphism identification using single strand  
CC conformational polymorphism (SSCP) analysis (ABZ72091-ABZ72184),  
CC sequencing (ABZ72185-ABZ72268) and genotyping (ABZ72317-ABZ72362)  
XX  
SQ Sequence 18 BP; 5 A; 3 C; 8 G; 2 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 18;  
Best Local Similarity 88.2%; Pred. No. 3.6e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 2322 GCTGCTTGTCACCCCA 2338

Db 18 GCTGCTTCTCATCCCA 2  
RESULT 4530  
ABL54126  
ID ABL54126 standard; DNA; 18 BP.  
XX  
AC ABL54126;  
XX  
DT 12-JUL-2002 (first entry)  
XX  
DE Cleavage product of FEN nuclease template Heltest4.  
XX  
KW FEN; endonuclease; nuclease; template; Heltest4; nucleic acid detection;  
KW ss.  
XX  
OS Synthetic.  
XX  
PN US6350580-B1.  
XX  
PD 26-FEB-2002.  
XX  
PF 11-OCT-2000; 2000US-00686179.  
XX  
PR 11-OCT-2000; 2000US-00686179.  
XX  
PA (STRA-) STRATAGENE.  
XX  
PI Sorge JA;  
XX  
DR WPI; 2002-380832/41.  
XX  
PT Detecting a target nucleic acid in a polymerase chain reaction process  
PT comprises forming a cleavage structure by incubating with a probe having  
PT secondary structure that changes upon binding and cleaving with a  
PT nuclease to release a fragment.  
XX  
PS Example 6; Col 66; 62pp; English.  
XX  
CC The present sequence is the 18-nucleotide cleavage product of FEN  
CC nuclease template 1 oligonucleotide, Heltest4 (see ABL54126), which was  
CC used in a method for determining FEN endonuclease activity. Heltest4  
CC binds to M13 to produce a complementary double-stranded domain and a non-  
CC complementary 5' overhang. This duplex forms template 2. Template 3 has  
CC an additional primer, FENAS (see ABL54127), bound to M13 and is directly  
CC adjacent to Heltest4. In the presence of template 3, FENAS binds the free  
CC 5' terminus of Heltest4, migrates to the junction and cleaves Heltest4 to  
CC produce the present 18-nucleotide fragment. FEN nuclease is preferred for  
CC use in the method of the invention, which relates to generating a signal  
CC to detect the presence of a target nucleic acid in a sample. In this  
CC method, a nucleic acid is treated with a probe that has a secondary  
CC structure which changes upon binding of the probe to a target nucleic  
CC acid sequence, and a nuclease. The invention also provides a process for  
CC detecting or measuring a nucleic acid that allows for concurrent  
CC amplification, cleavage and detection of a target nucleic acid sequence  
CC in a sample  
XX  
SQ Sequence 18 BP; 15 A; 0 C; 0 G; 3 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 18;  
Best Local Similarity 88.2%; Pred. No. 3.6e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 2786 AAAAAAAAAAAAAAAAAA 2802  
Db 1 AAATAAATAAAAAAAAAA 17  
RESULT 4531  
ABL54126/c  
ID ABL54126 standard; DNA; 18 BP.  
XX







XX PS Example 6; Page 37; 62pp; English.

XX CC The present sequence represents the cleavage product of an oligonucleotide used to test FEN nuclease activity. FEN nucleases are used in the course of the invention. The specification describes a method for generating a signal indicative of the presence of a target nucleic acid sequence in a sample. The method comprises forming a cleavage structure comprising duplex and single-stranded nucleic acid, by incubating the target nucleic acid sequence with a probe having a secondary structure that changes upon binding of the probe to the target nucleic acid sequence, and cleaving the cleavable structure with a nuclease to release a nucleic acid fragment. The method is useful for generating a signal indicative of the presence of target nucleic acid sequence in a sample. It is useful in a polymerase chain reaction (PCR)-based assay or non-PCR based assay for detecting naturally occurring target nucleic acid sequences in a solution including RNA and DNA that is isolated and purified from cells, tissues, single cell organisms, bacteria or viruses, and for detecting synthetic targets in solution, including RNA or DNA oligonucleotides, and peptide nucleic acids

XX SQ Sequence 18 BP; 15 A; 0 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 18;  
Best Local Similarity 88.2%; Pred. No. 3.6e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2166 TTTT TTTT TTTT TTTT TTTT 2182  
Db 17 TTTT TTTT TTTT TTTT 1

RESULT 4536  
ABS52682/C

ID ABS52682 standard; DNA; 18 BP.

XX AC ABS52682;

XX 15-NOV-2002 (first entry)

DE mRNA display splint oligonucleotide.

XX Translation; ss; splint; cell-free translation system; insulin; growth hormone; erythropoietin; ribosome display; mRNA display.

XX Synthetic.

XX WO200259293-A2.

XX 01-AUG-2002.

XX 25-JAN-2002; 2002WO-US002344.

XX 25-JAN-2001; 2001US-0264147P.

XX (FORS/) FORSTER A C.

XX (BLAC/) BLACKLOW S C.

XX Forster AC, Blacklow SC;

XX WPI; 2002-608454/65.

XX A new reconstituted cell-free translation system comprising translation factors and tRNA species capable of translating exogenously added mRNAs, useful for the synthesis of peptides or protein ligands or catalysts, e.g. insulin.

XX Disclosure; Page 15; 83pp; English.

XX PS This invention relates to a novel reconstituted cell-free translation system comprising translation factors and transfer ribonucleic acid (tRNA) species which translate exogenously added messenger RNA (mRNA) with highly selective incorporation at each codon to form a peptide or a

CC peptidomimetic product when the system includes one or more tRNA species charged with a synthetic amino acid or amino acid analogue. The translation system of the invention is useful for the synthesis of peptide or protein ligands or catalysts, such as insulin, growth hormone or erythropoietin, and for pure ribosome display and pure mRNA display selection experiments. The translation process provides a simplified, highly purified system that offers potentially improved routes to all peptides and proteins currently synthesised by alternative routes. This overcomes the limitations of the prior art, e.g. difficulty in maintaining purified components and trace contaminants or inefficient processivity. There are several advantages associated with performing peptide and protein display in a pure system, such as an expected lack of post-translational modification of peptides, lack of proteases which often cause protein degradation problem and a lack of competition from contaminants in the selection steps. The present sequence represents a splint oligonucleotide used in the mRNA display method used in the invention

XX SQ Sequence 18 BP; 4 A; 2 C; 0 G; 12 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 18;  
Best Local Similarity 88.2%; Pred. No. 3.6e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2778 TAGAATTGAAAAA 2794  
Db 17 TTGAATTAAAAA 1

RESULT 4537  
AAS95764

ID AAS95764 standard; DNA; 18 BP.

XX AC AAS95764;

XX 14-FEB-2002 (first entry)

DE Human adenine nucleotide translocator (ANT)-related PCR primer #13.

XX Human; adenine nucleotide translocator; ANT; ss; PCR primer; mitochondrial matrix protein.

XX Synthetic.

XX WO200185944-A2.

XX 15-NOV-2001.

XX 11-MAY-2001; 2001WO-US015416.

XX 11-MAY-2000; 2000US-00569327.

XX (MITO-) MITOKOR.

XX Anderson CM, Davis RE, Clevenger W, Wiley SE, Miller SW; Szabo TR, Ghosh SS, Moos WH, Pei Y, Carroll AK; WPI; 2002-055598/07.

XX Novel recombinant expression construct for producing adenine nucleotide translocator polypeptides, comprises a regulated promoter linked to nucleic acid encoding the polypeptide.

XX Disclosure; Page 140; 147pp; English.

XX The invention relates to a recombinant expression construct (I) comprising a regulated promoter operably linked to a nucleic acid encoding an adenine nucleotide translocator (ANT) polypeptide. ANT proteins mediate the exchange of ATP synthesised in the mitochondrial matrix for ADP in the cytosol. (I) is useful for producing recombinant ANT polypeptide by transforming a prokaryotic or eukaryotic host cell and culturing the host cell. (I) is also useful for targeting a polypeptide of interest to a mitochondrial membrane, where ANT polypeptide is

CC expressed as a fusion protein with the polypeptide of interest.  
CC Recombinant ANT polypeptide, or cells expressing the polypeptide, is  
CC useful for identifying an agent that binds to an ANT polypeptide. ANT  
CC ligand is useful for determining the presence of an ANT polypeptide.  
CC preferably AN1, ANT2 or ANT3 in a biological sample and for isolating  
CC ANT from a biological sample, where the ANT ligand is covalently or non-  
CC covalently bound to a solid phase. Detectably labeled ANT ligand is also  
CC useful for identifying an agent that interacts with an ANT polypeptide.  
CC AAS95746-AAS95783 represent human ANT PCR primers and related primers of  
CC the invention. Note: Primers AAS9550-AAS9551 and AAS95754-AAS95771 are  
CC not described in the specification  
XX

SQ Sequence 18 BP; 5 A; 3 C; 5 G; 5 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 18;  
Best Local Similarity 88.2%; Pred. No. 3.6e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1129 TGAAGCCGAATTCCTA 1145  
||||| ||| |||||  
Db 1 TGAAGCGGAAGTTCCTA 17

RESULT 4538  
ABK94050  
ID ABK94050 standard; DNA; 18 BP.  
XX  
AC ABK94050;  
XX  
DT 27-AUG-2002 (first entry)  
XX  
DE Cardiovascular regulatory gene promoter PCR primer #2.  
XX  
KW Endothelin; EDN; endothelin converting enzyme; ECE; endothelin receptor;  
KW EDNR; signaling system; cardiovascular disease; coronary heart disease;  
KW hypertension; atherosclerosis; angiogenesis; fatty acid metabolism;  
KW diabetes; familial hypercholesterolaemia; forensic marker;  
KW transgenic animal; solid support; cardiovascular regulator; PCR; primer;  
KW ss.

OS Synthetic.  
XX  
XX WO200224747-A2.  
PN  
XX  
PD 28-MAR-2002.  
XX  
XX 31-AUG-2001; 2001WO-EP010087.  
PF  
XX 19-SEP-2000; 2000EP-00120123.  
PR  
XX (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.  
PA  
XX Brinkmann U, Hoffmeyer S;  
PI  
XX WPI; 2002-435060/46.  
DR  
XX

PT Novel polynucleotide of the endothelin/endothelin converting  
PT enzyme/receptors of endothelin and endothelin converting enzyme signaling  
PT system associated with cardiovascular disease, useful for treating the  
PT disease.  
XX

PS Example 6; Page 53; 190pp; English.  
XX  
CC The invention describes a polynucleotide (I) of the endothelin  
CC (EDN)/endothelin converting enzyme (ECE)/receptors of EDN and ECE (EDNR)  
CC signaling system which is associated with a cardiovascular disease. (I),  
CC the gene encoding EDN, ECE or EDNR (II) or a vector (III) expressing (I)  
CC or (II) is useful for producing cells capable of expressing a molecular  
CC variant polypeptide which is associated with a cardiovascular disease.  
CC (II), (III), the EDN, ECE or EDNR polypeptide, or a cell expressing a  
CC molecular variant gene comprising (I) is useful for identifying and  
CC obtaining a pro-drug or drug capable of modulating the activity of a  
CC molecular variant of a polypeptide of the EDN/EDNR/ECE signaling system

CC or its gene product, or for identifying and obtaining an inhibitor of the  
CC activity of a molecular variant of a polypeptide of the EDN/EDNR/ECE  
CC signaling system or its gene product. The isolated proteins and  
CC polynucleotides encoding them are useful for preparation of a  
CC pharmaceutical composition for treating a cardiovascular disease such as  
CC coronary heart disease, hypertension, atherosclerosis, or related to  
CC abnormal angiogenesis or fatty acid metabolism e.g. diabetes and familial  
CC hypercholesterolaemia. The gene or a polynucleotide fragment of the  
CC EDN/ECE/EDNR signaling system are useful as forensic markers, for  
CC creating a transgenic animal and in creation of a solid support  
CC comprising polynucleotides, genes, vectors, polypeptides, antibodies or  
CC host cells of the invention. This sequence represents a PCR primer used  
CC to isolate a cardiovascular regulator polynucleotide from DNA encoding  
CC members of the EDN/ECE/EDNR signaling pathway  
XX

SQ Sequence 18 BP; 2 A; 9 C; 5 G; 2 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 18;  
Best Local Similarity 88.2%; Pred. No. 3.6e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 63 GCGGCAGACGCTGGTC 79  
||| ||||| |||||  
Db 1 GCGGCAGACGCTGGTC 17

RESULT 4539  
AAD41291  
ID AAD41291 standard; DNA; 18 BP.  
XX

AC AAD41291;  
XX  
DT 30-OCT-2002 (first entry)  
XX  
DE Human C6ST gene amplifying 3' PCR primer #1.

XX Human; chondroitin 6-sulfotransferase; C6ST; chondroitin 6-sulphate; C6S;  
KW biological function; extracellular matrix; atherosclerosis; therapeutic;  
KW gene expression; enzyme; PCR; primer; ss.

OS Homo sapiens.  
XX  
XX US6399358-B1.  
PN  
XX 04-JUN-2002.  
PD  
XX 29-JAN-1998; 98US-00015188.  
PF  
XX 31-MAR-1997; 97US-0037019P.  
PR  
XX 02-JUL-1997; 97US-0052745P.  
PR  
XX (UYJE-) UNIV JEFFERSON THOMAS.  
PA  
XX Williams KJ, Tabas I;  
PI  
XX WPI; 2002-535977/57.  
DR

XX Novel recombinant human chondroitin 6-sulfotransferase polynucleotide  
PT segment, useful in molecular study of human extracellular matrix, and for  
PT studying biological functions of chondroitin 6-sulfate.  
XX  
PS Disclosure; Col 18; 15pp; English.  
XX

CC The present invention relates to human chondroitin 6-sulfotransferase  
CC (C6ST) proteins and polynucleotides encoding such proteins. Sequences of  
CC the invention are useful in the molecular study of human extracellular  
CC matrix, for studying the biological functions of chondroitin 6-sulphate  
CC (C6S), in screening test for detecting C6ST polymorphs, for ascertaining  
CC and evaluating the role C6ST plays in atherosclerosis and for identifying  
CC potential therapeutics, i.e., inhibitors of enzyme or modulators of gene  
CC expression. The present DNA sequence is a PCR primer which is used for  
CC amplifying human C6ST gene  
XX



```
SQ Sequence 18 BP; 3 A; 1 C; 9 G; 5 T; 0 U; 0 Other;
Query Match 0.5%; Score 13.8; DB 1; Length 18;
Best Local Similarity 88.2%; Pred. No. 3.6e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 998 TTGCGGGGAGAGTTGGA 1014
|||||
Db 1 TTGCGGGGAGAGTTGTA 17

RESULT 4540
ABK87302
ID ABK87302 standard; DNA; 18 BP.
XX
AC ABK87302;
XX
DT 24-SEP-2002 (first entry)
XX
DE FEN 1 nuclease cleavage product.
XX
KW ss; nucleic acid detection; FEN nuclease.
XX
OS Synthetic.
XX
PN WO200244326-A2.
XX
PD 06-JUN-2002.
XX
PF 26-NOV-2001; 2001WO-US044215.
XX
PR 30-NOV-2000; 2000US-00728574.
XX
PA (STRA-) STRATAGENE.
XX
PI Sorge JA, Whalen AM;
XX
DR WPI; 2002-508503/54.
XX
PT Detecting/measuring target nucleic acid, by forming cleavage structure by
incubating target nucleic acid with probe having binding moiety, cleaving
PT structure to release nucleic acid and detecting released fragments.
XX
PS Disclosure; Page 38; 157pp; English.
XX
This invention relates to a novel method for detecting/measuring a target
nucleic acid. The method comprises forming a cleavage structure by
incubating the target sequence with a probe comprising a binding moiety
and a secondary structure that changes upon binding of the probe to the
target, cleaving the cleavage structure to release a nucleic acid
fragment, and detecting and/or measuring the fragment captured by binding
of the binding moiety to a capture element on a solid support. The method
of the invention is useful for detecting or measuring a target nucleic
acid and are useful for generating a signal indicative of the presence of
the target nucleic acid in a sample. Another method of the invention is
useful for simultaneously forming a cleavage structure, amplifying the
target nucleic acid in a sample and cleaving the cleavage structure. The
method does not require multiple steps, subsequent amplification process,
and allows for concurrent amplification and detection of target nucleic
acid in a sample. The present sequence represents a cleavage product
generated by FEN 1 nuclease shown in an example of the method of the
invention
XX
SQ Sequence 18 BP; 15 A; 0 C; 0 G; 3 T; 0 U; 0 Other;
Query Match 0.5%; Score 13.8; DB 1; Length 18;
Best Local Similarity 88.2%; Pred. No. 3.6e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2786 AAAAAAAAAAAAAAAAAA 2802
|||||
Db 1 AAAATAAATAAAAAAAAA 17

RESULT 4542
ABK98126/c
ID ABK98126 standard; DNA; 18 BP.
XX
AC ABK98126;
XX
DT 07-OCT-2002 (first entry)
XX
DE Triple helix forming associated oligonucleotide #15.
```

```
RESULT 4541
ABK87302/c
ID ABK87302 standard; DNA; 18 BP.
XX
AC ABK87302;
XX
DT 24-SEP-2002 (first entry)
XX
DE FEN 1 nuclease cleavage product.
XX
KW ss; nucleic acid detection; FEN nuclease.
XX
OS Synthetic.
XX
PN WO200244326-A2.
XX
PD 06-JUN-2002.
XX
PF 26-NOV-2001; 2001WO-US044215.
XX
PR 30-NOV-2000; 2000US-00728574.
XX
PA (STRA-) STRATAGENE.
XX
PI Sorge JA, Whalen AM;
XX
DR WPI; 2002-508503/54.
XX
PT Detecting/measuring target nucleic acid, by forming cleavage structure by
incubating target nucleic acid with probe having binding moiety, cleaving
PT structure to release nucleic acid and detecting released fragments.
XX
PS Disclosure; Page 38; 157pp; English.
XX
This invention relates to a novel method for detecting/measuring a target
nucleic acid. The method comprises forming a cleavage structure by
incubating the target sequence with a probe comprising a binding moiety
and a secondary structure that changes upon binding of the probe to the
target, cleaving the cleavage structure to release a nucleic acid
fragment, and detecting and/or measuring the fragment captured by binding
of the binding moiety to a capture element on a solid support. The method
of the invention is useful for detecting or measuring a target nucleic
acid and are useful for generating a signal indicative of the presence of
the target nucleic acid in a sample. Another method of the invention is
useful for simultaneously forming a cleavage structure, amplifying the
target nucleic acid in a sample and cleaving the cleavage structure. The
method does not require multiple steps, subsequent amplification process,
and allows for concurrent amplification and detection of target nucleic
acid in a sample. The present sequence represents a cleavage product
generated by FEN 1 nuclease shown in an example of the method of the
invention
XX
SQ Sequence 18 BP; 15 A; 0 C; 0 G; 3 T; 0 U; 0 Other;
Query Match 0.5%; Score 13.8; DB 1; Length 18;
Best Local Similarity 88.2%; Pred. No. 3.6e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2166 TTTT TTTT TTTT TTTT TTTT TTTT 2182
|||||
Db 17 TTTT TTTT TTTT TTTT TTTT TTTT

RESULT 4542
ABK98126/c
ID ABK98126 standard; DNA; 18 BP.
XX
AC ABK98126;
XX
DT 07-OCT-2002 (first entry)
XX
DE Triple helix forming associated oligonucleotide #15.
```

XX Triple-helix formation; purine-rich target sequence; double-helix DNA;  
KW gene expression; regulatory sequence; pathogenic double-stranded DNA;  
KW pathogenic bacteria; virus; replication; virulence; cancer;  
KW oncogene suppression; cancerous cell; cytostatic; antimicrobial; ss.  
XX Synthetic.  
OS  
XX US6403302-B1.  
PN  
XX  
XX  
PD 11-JUN-2002.  
XX  
XX  
PF 16-DEC-1993; 93US-00168920.  
XX  
XX  
PR 17-SEP-1992; 92US-00946976.  
XX  
XX (CALY ) CALIFORNIA INST OF TECHNOLOGY.  
PA Dervan PB, Beal PA;  
XX WPI; 2002-536030/57.  
DR  
XX  
XX A triple-helix comprising a double helical nucleic acid (DHNA) and an  
PT oligonucleotide which binds in parallel and antiparallel orientation,  
PT respectively, for targeting sequences on alternate strands of DHNA to  
PT control gene expression.  
XX  
XX Example 7; Col 41; 108pp; English.  
PS  
XX  
XX The present invention relates to methods and oligonucleotides for forming  
CC a triple-helix comprising a double helical nucleic acid comprising first  
CC and second substantially complementary strands, and an oligonucleotide  
CC bound to a purine-rich target sequence within the double helical nucleic  
CC acid, where the oligonucleotide binds in a parallel and antiparallel  
CC orientation, respectively, to target sequences on alternate strands of  
CC the double helical nucleic acid. The method has therapeutic applications,  
CC where gene expression is controlled by selective triple-helix formation  
CC within expression regulatory sequences of a target gene. The  
CC oligonucleotides can be used to form triple-helices, and are useful to  
CC detect the presence or absence of specific sequences within genomic DNA  
CC for diagnostic and therapeutic purposes. The oligonucleotides can be  
CC selected to specifically bind to pathogenic double-stranded DNA including  
CC specific sequences required by pathogenic bacteria or viruses for  
CC replication or virulence, reducing their pathogenicity. Alternatively,  
CC the oligonucleotide can be chosen to target a unique sequence of the  
CC pathogen which is not found in the genome of pathogen's host. The  
CC oligonucleotides can be used in cancer treatment by way of triple-helix  
CC suppression of specific oncogenes including those of endogenous or viral  
CC origin. Such therapeutic oligonucleotides are capable of forming triple-  
CC helices with such sequences in cancerous cells containing the activated  
CC oncogene, so preferentially killing or repressing the cancer causing  
CC cell. The present sequence represents an oligonucleotide used in the  
CC methods of the present invention  
XX  
SQ Sequence 18 BP; 0 A; 2 C; 0 G; 14 T; 0 U; 2 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 18;  
Best Local Similarity 82.4%; Pred. No. 3.6e+03;  
Matches 14; Conservative 2; Mismatches 1; Indels 0; Gaps 0;  
QY 2785 GAAAAAAAAAAAAAAA 2801  
Db 17 GAAAAAHGAAAAHAAA 1  
RESULT 4543  
ABX75115/c  
ID ABX75115 standard; DNA; 18 BP.  
XX  
AC ABX75115;  
XX  
DT 25-MAR-2003 (first entry)  
XX

DE Human gene 216 sequence containing SNP #10.  
XX  
KW Human; mouse; ds; gene 216; antiasthmatic; antiinflammatory; anorectic;  
KW chromosome 20p13-p12; single nucleotide polymorphism; SNP; gene therapy;  
KW respiratory disease; asthma; obesity; bronchial hyper-responsiveness;  
KW chronic obstructive pulmonary disease;  
KW adult respiratory distress syndrome; inflammatory bowel syndrome.  
XX  
OS Homo sapiens.  
XX  
XX WO200283077-A2.  
PN  
XX  
XX 24-OCT-2002.  
PD  
XX  
XX 15-APR-2002; 2002WO-US012063.  
PF  
XX  
XX 13-APR-2001; 2001US-00834597.  
PR  
XX  
XX 13-APR-2001; 2001WO-US012245.  
XX  
XX (SCHE ) SCHERING CORP.  
PA (GENO-) GENOME THERAPEUTICS CORP.  
XX  
XX Keith T, Little RD, Van Eerdewegh P, Dupuis J, Del Mastro RG;  
PI Simon J, Allen K, Pandit S;  
XX WPI; 2003-092960/08.  
DR  
XX  
XX New isolated gene 216 nucleic acids, useful for diagnosing, preventing or  
PT treating a disorder, such as asthma, bronchial hyper-responsiveness,  
PT chronic obstructive pulmonary disease, obesity or inflammatory bowel  
PT syndrome.  
XX  
XX Disclosure; Page 588; 650pp; English.  
PS  
XX  
XX This invention relates to a novel isolated nucleic acid, gene 216,  
CC identified from human chromosome 20p13-p12. The invention also discloses  
CC regions of the 216 gene that contain single nucleotide polymorphisms  
CC (SNP's) which may be used as markers for disease susceptibility or  
CC severity. The nucleotides of the invention may have antiasthmatic,  
CC antiinflammatory or anorectic activities and may be used in gene therapy.  
CC The nucleic acids, antibodies or its fragments are useful for diagnosing,  
CC preventing or treating a disorder, such as respiratory diseases (e.g.  
CC asthma, bronchial hyper-responsiveness, chronic obstructive pulmonary  
CC disease or adult respiratory distress syndrome), obesity, or inflammatory  
CC bowel syndrome. The nucleic acids are also useful for identifying  
CC increased susceptibility of a subject to the disorders mentioned. The  
CC nucleic acids can also be used as primers and templates for the  
CC recombinant production of disorder-associated peptides or polypeptides,  
CC for chromosome and gene mapping, or for tissue distribution studies. The  
CC present sequence represents a gene 216 DNA sequence used in the scope of  
CC the invention  
XX  
SQ Sequence 18 BP; 5 A; 3 C; 8 G; 2 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 18;  
Best Local Similarity 88.2%; Pred. No. 3.6e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 2322 GCTGCTTGTCACCCCCA 2338  
Db 18 GCTGCTTCTCATCCCA 2  
RESULT 4544  
ABV75014/c  
ID ABV75014 standard; DNA; 18 BP.  
XX  
AC ABV75014;  
XX  
DT 04-FEB-2003 (first entry)  
XX  
DE Nucleotide sequence of a PCR oligo M8.  
XX

KW Molecular clasp; transducer; effector; diagnostic; drug discovery; PCR; primer; ss.  
KW  
XX  
OS Synthetic.  
XX  
PN WO200279387-A2.  
XX  
PD 10-OCT-2002.  
XX  
XX  
PF 28-MAR-2002; 2002WO-US010171.  
XX  
PR 28-MAR-2001; 2001US-0279524P.  
PR 28-NOV-2001; 2001US-00995847.  
XX  
PA (ENGE-) ENGINEOS INC.  
XX  
XX Rizzuto CD, Afeyan NB, Lee FD, Church GM, Gupta RD, Schwartz JJ;  
PI Zhang B, Lugovskoy AA;  
PI  
XX  
DR WPI; 2003-040675/03.  
XX  
XX New modular molecular clasps, useful in health care industry, e.g. in therapy, in clinical diagnostics, in vivo imaging or in drug discovery, environmental diagnostics, industrial diagnostics, food safety or toxicology.  
XX  
PS Example 2; Page 40; 63pp; English.  
XX  
CC The invention relates to a modular molecular clasp (I) comprising several heterologous components including a molecular recognition element, an effector, and a transducer. The transducer is constructed to facilitate allosteric alteration of (I) in response to ligand binding to the molecular recognition element, producing a detectable change in an activity of the effector. The transducer may comprise a pair of polypeptides that form a non-covalently bound complex in response to ligand binding, or in the absence of ligand binding to the molecular recognition element. The modular molecular clasps, arrays and biosensors are useful in health care industry, e.g. in therapy, in clinical diagnostics, in vivo imaging or in drug discovery. The clasps can also be used in environmental diagnostics, industrial diagnostics, food safety, toxicology, catalysis of reactions or high-throughput screening, as well as in agricultural industry and in basic research. The clasps are useful in produg therapy, in studying the relationship between a subject's protein expression profile and the subject's response to a foreign compound or drug. Sequences ABV75007-5027 represent oligonucleotides used in PCR reactions for creating a CFP-YFP vector for molecular cloning of engineered single chain antibodies containing variable linker regions  
XX  
SQ Sequence 18 BP; 4 A; 5 C; 7 G; 2 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 18;  
Best Local Similarity 88.2%; Pred. No. 3.6e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 74 CTGGTCACCGTGACCCC 90  
DB 18 CTGGTCACCGTGAGCTC 2  
RESULT 4545  
ADE39920  
ID ADE39920 standard; DNA; 18 BP.  
XX  
AC ADE39920;  
XX  
DT 29-JAN-2004 (first entry)  
XX  
DE Human Midkine intron 3 DNA fragment.  
XX  
KW Midkine; MK; colorectal cancer; SNP; single nucleotide polymorphism;  
KW human; ds; intron 3.  
XX  
OS Homo sapiens.

XX  
FH Location/Qualifiers  
FT replace(10,T)  
FT /\*tag= a  
FT /standard\_name= "Single nucleotide polymorphism"  
FT /note= "SNP variant is associated with cancer"  
XX  
PN EP1314787-A2.  
XX  
XX  
PD 28-MAY-2003.  
XX  
XX  
PF 22-NOV-2002; 2002EP-00026076.  
XX  
PR 26-NOV-2001; 2001JP-00359503.  
XX  
PA (KUDO/) KUDOH N.  
XX  
XX Shinozawa T, Ahmed KM, Shitara Y, Kuwano H, Takenoshita S;  
PI  
XX WPI; 2003-620030/59.  
XX  
XX Calculating the risk of developing cancer e.g. colorectal cancer, comprises obtaining a sample derived from an individual, analyzing polymorphisms of the Midkine gene and calculating the risk of developing cancer based on the polymorphisms.  
XX  
PS Disclosure; Fig 1; 19pp; English.  
XX  
CC The invention relates to a novel method of calculating the risk of onset of cancer in an individual comprising obtaining a sample derived from the individual, analysing polymorphisms of the Midkine (MK) gene and calculating the risk of onset of cancer based on the polymorphisms. The method, program, calculating device and DNA micro array of the invention may be useful for calculating the risk of colorectal cancer in an individual. The current sequence is that of the human Midkine intron 3 DNA fragment of the invention.  
XX  
SQ Sequence 18 BP; 1 A; 5 C; 10 G; 2 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 18;  
Best Local Similarity 88.2%; Pred. No. 3.6e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 113 GGCTGGGGGGATCCTGG 129  
DB 1 GCCTGGGGGGACCTGG 17  
RESULT 4546  
AAQ20028  
ID AAQ20028 standard; DNA; 19 BP.  
XX  
AC AAQ20028;  
XX  
DT 01-APR-1992 (first entry)  
XX  
DE Cross-linking oligomer 114 for targeting HUMIL1B.  
XX  
KW deoxyribonucleic acid; major groove; ethanoamino group; IL-1;  
KW aziridinylcytosine; cross-linking group; O-xyloso linking group;  
KW human interleukin-1 beta; inverted polarity region; ss.  
XX  
OS Synthetic.  
XX  
XX  
FH Location/Qualifiers  
FT modified\_base 1  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "N-methyl-8-oxo-2'-deoxyadenine"  
FT modified\_base 4  
FT /\*tag= b  
FT /mod\_base= OTHER  
FT /note= "N-methyl-8-oxo-2'-deoxyadenine"





DE Oligomer HUM beta 115 for forming triplex with IL-1 target duplex.  
XX Human interleukin - 1 beta gene; herpes simplex; AIDS; modified; HIV;  
KW RSV; HPV; malignancy; hepatitis; inflammation; ss.  
XX Synthetic.  
OS  
XX  
FH Key Location/Qualifiers  
FT modified\_base 1 /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "OTHER= N4 N4 ethanocytosine"  
FT modified\_base 4  
FT /\*tag= b  
FT /mod\_base= m5c  
FT misc\_feature 13. .14  
FT /\*tag= g  
FT /note= "o-xyloso dimer synthon linkage"  
FT misc\_feature 14. .20  
FT /\*tag= f  
FT /label= inverted\_polarity\_region  
FT /note= "see comments"  
FT modified\_base 14  
FT /\*tag= c  
FT /mod\_base= m5c  
FT modified\_base 18  
FT /\*tag= d  
FT /mod\_base= m5c  
FT modified\_base 19  
FT /\*tag= e  
FT /mod\_base= OTHER  
FT /note= "OTHER= N4 N4 ethanocytosine"  
XX  
PN WO9209705-A1.  
XX  
PD 11-JUN-1992.  
XX  
PF 25-NOV-1991; 91WO-US008811.  
XX  
PR 23-NOV-1990; 90US-00617907.  
PR 18-JAN-1991; 91US-00643382.  
PR 08-APR-1991; 91US-00683420.  
PR 17-APR-1991; 91US-00686544.  
PR 17-APR-1991; 91US-00686546.  
PR 27-APR-1991; 91US-00686547.  
PR 27-SEP-1991; 91US-00766733.  
XX  
PA (GILE-) GILEAD SCI INC.  
XX  
PI Froehler B, Krawczyk S, Matteucci MD, Milligan J;  
XX WPI; 1992-217083/26.  
DR  
XX New oligomers contg. modified bases - which form a triplex with G-C  
PT doublet in a DNA duplex, for treating and diagnosing HIV, hepatitis,  
PT herpes malignancy and inflammation.  
XX  
PS Claim 12; Page 70; 77pp; English.  
XX  
CC The synthetic oligomer is capable of forming a triplex at physiological  
CC pH with a purine rich target sequence by coupling into the major groove  
CC of the duplex. The specific target sequence of this oligomer is the human  
CC interleukin -1 beta gene beginning at nucleotide 7378 contg. a purine  
CC rich sequence concd. on one strand of the duplex. The oligomer, and  
CC others like it are useful in diagnosis and therapy of diseases  
CC characterised by specific DNA duplex targets, e.g. HPV; HER; HIV,  
CC hepatitis B, herpes, malignant tumours and inflammation. The triple  
CC helices form under mild conditions thus assays may be carried out without  
CC subjecting the test specimen to harsh conditions. The oligomer contains  
CC an inverted polarity region formed from an o-xyloso dimer synthon. The  
CC linking gp. is o-xylos (nucleotides have the 3' positions of xylose  
CC sugars linked via the o-ylene ring). Two nucleotides are coupled through  
CC a xylene residue to form the dimer synthon. This additional modifications

CC may render the oligomer stable to nuclease activity. The oligomer is able  
CC to inhibit gene expression, as verified by in vitro systems. See also  
CC AAQ25452-25501 and AAQ30226-448. (Updated on 25-MAR-2003 to correct PN  
CC field.)  
XX  
SQ Sequence 19 BP; 3 A; 2 C; 0 G; 14 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 19;  
Best Local Similarity 88.2%; Pred. No. 3.9e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 2165 CTTTTTTTTTTTTTTT 2181  
Db 1 CTTATTTTTTTTATT 17  
  
RESULT 4549  
AAQ30374  
ID AAQ30374 standard; DNA; 19 BP.  
XX  
AC AAQ30374;  
XX  
DT 25-MAR-2003 (revised)  
DT 07-DEC-1992 (first entry)  
XX  
DE Oligomer HUM beta 114 for forming triplex with IL-1 target duplex.  
XX  
KW Human interleukin - 1 beta gene; herpes simplex; AIDS; modified; HIV;  
KW RSV; HPV; malignancy; hepatitis; inflammation; ss.  
XX Synthetic.  
XX  
FH Key Location/Qualifiers  
FT modified\_base 1 /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "OTHER= N6 methyl-8-oxo 2' deoxyadenine"  
FT modified\_base 4  
FT /\*tag= b  
FT /mod\_base= m5c  
FT misc\_feature 13. .14  
FT /\*tag= g  
FT /note= "o-xyloso dimer synthon linkage"  
FT misc\_feature 14. .20  
FT /\*tag= f  
FT /label= inverted\_polarity\_region  
FT /note= "see comments"  
FT modified\_base 14  
FT /\*tag= c  
FT /mod\_base= m5c  
FT modified\_base 18  
FT /\*tag= d  
FT /mod\_base= m5c  
FT modified\_base 19  
FT /\*tag= e  
FT /mod\_base= OTHER  
FT /note= "OTHER= N4 N4 ethanocytosine"  
XX  
PN WO9209705-A1.  
XX  
PD 11-JUN-1992.  
XX  
PF 25-NOV-1991; 91WO-US008811.  
XX  
PR 23-NOV-1990; 90US-00617907.  
PR 18-JAN-1991; 91US-00643382.  
PR 08-APR-1991; 91US-00683420.  
PR 17-APR-1991; 91US-00686544.  
PR 17-APR-1991; 91US-00686546.  
PR 17-APR-1991; 91US-00686547.  
PR 27-SEP-1991; 91US-00766733.  
XX  
PA (GILE-) GILEAD SCI INC.















CC may be used to investigate viral and cellular mechanisms of  
CC transcription/translation, or mRNA maturation  
XX  
SQ Sequence 19 BP; 3 A; 1 C; 1 G; 0 T; 14 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 19;  
Best Local Similarity 11.8%; Pred. No. 3.9e+03;  
Matches 2; Conservative 13; Mismatches 2; Indels 0; Gaps 0;  
QY 2176 TTTT TTTT TTTT TTTT TTTT TTTT TTTT TTTT TTTT TTTT 2192  
Db 2 UUUUUUUUUUUUUUUUUUUUU 18  
RESULT 4560  
AAT47272  
ID AAT47272 standard; RNA; 19 BP.  
XX  
AC AAT47272;  
XX  
DT 28-AUG-1997 (first entry)  
XX  
DE Capped RNA influenza endonuclease substrate #6.  
XX  
KW Capped RNA molecule; mRNA maturation; translation initiation; influenza;  
KW endonuclease aptamer; RNase; therapy; inhibitor; ss.  
XX  
OS Synthetic.  
XX  
FH Key Location/Qualifiers  
FT modified\_base 1 /\*tag= a  
FT /\*mod\_base= triphosphorylated  
FT modified\_base 2 /\*tag= b  
FT /\*mod\_base= 2'-O-methyluridine  
FT modified\_base 6 /\*tag= c  
FT /\*mod\_base= 2'-deoxy-2'-fluoro-uridine  
FT modified\_base 12 /\*tag= d  
FT /\*mod\_base= 2'-deoxy-2'-fluoro-uridine  
FT modified\_base 13 /\*tag= e  
FT /\*mod\_base= 2'-deoxy-2'-fluoro-adenosine  
XX  
PN WO9640159-A1.  
XX  
PD 19-DEC-1996.  
XX  
PF 03-JUN-1996; 96WO-US008394.  
XX  
PR 07-JUN-1995; 95US-00480068.  
XX  
PA (MERI ) MERCK & CO INC.  
XX  
PI Benseler F, Cole JL, Kuo LC, Olsen DB;  
XX  
DR WPI; 1997-051868/05.  
XX  
PT Production of capped RNA or analogues - useful as substrates for  
PT influenza virus associated virally encoded endonuclease.  
XX  
PS Claim 18; Page 14; 39pp; English.  
XX  
CC AAT47264-T47280 represent capped RNA molecules produced by the method of  
CC the invention. The method of the invention is for producing capped RNA or  
CC RNA analogues. The method comprises reacting a RNA or analogue  
CC oligonucleotide with a phosphate addition agent to form a RNA or analogue  
CC mono-, di- or triphosphate, which is then capped. The presence of the cap  
CC is important for mRNA maturation, initiation of translation, and protects  
CC the mRNA against various RNases present in the cell. The capped RNA or  
CC analogue is an influenza endonuclease aptamer, useful for treating or  
CC

CC preventing an influenza infection in an animal. The synthetic capped RNA  
CC are substrates for virally encoded endonuclease associated with influenza  
CC virus. The short non-extendible (due to their length or because of the  
CC modification of the 3' end of the oligo) RNA molecules are potent  
CC inhibitors of the cleavage of capped RNA by influenza endonuclease. They  
CC may be used to investigate viral and cellular mechanisms of  
CC transcription/translation, or mRNA maturation  
XX  
SQ Sequence 19 BP; 3 A; 1 C; 1 G; 0 T; 14 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 19;  
Best Local Similarity 11.8%; Pred. No. 3.9e+03;  
Matches 2; Conservative 13; Mismatches 2; Indels 0; Gaps 0;  
QY 2176 TTTT TTTT TTTT TTTT TTTT TTTT TTTT TTTT TTTT TTTT 2192  
Db 2 UUUUUUUUUUUUUUUUUUUUU 18  
RESULT 4561  
AAT47278  
ID AAT47278 standard; RNA; 19 BP.  
XX  
AC AAT47278;  
XX  
DT 28-AUG-1997 (first entry)  
XX  
DE Capped RNA influenza endonuclease substrate #10.  
XX  
KW Capped RNA molecule; mRNA maturation; translation initiation; influenza;  
KW endonuclease aptamer; RNase; therapy; inhibitor; ss.  
XX  
OS Synthetic.  
XX  
FH Key Location/Qualifiers  
FT modified\_base 1 /\*tag= a  
FT /\*mod\_base= triphosphorylated  
FT modified\_base 2 /\*tag= b  
FT /\*mod\_base= 2'-O-methyluridine  
FT modified\_base 13 /\*tag= c  
FT /\*mod\_base= phosphorothioated  
XX  
PN WO9640159-A1.  
XX  
PD 19-DEC-1996.  
XX  
PF 03-JUN-1996; 96WO-US008394.  
XX  
PR 07-JUN-1995; 95US-00480068.  
XX  
PA (MERI ) MERCK & CO INC.  
XX  
PI Benseler F, Cole JL, Kuo LC, Olsen DB;  
XX  
DR WPI; 1997-051868/05.  
XX  
PT Production of capped RNA or analogues - useful as substrates for  
PT influenza virus associated virally encoded endonuclease.  
XX  
PS Claim 18; Page 15; 39pp; English.  
XX  
CC AAT47264-T47280 represent capped RNA molecules produced by the method of  
CC the invention. The method of the invention is for producing capped RNA or  
CC RNA analogues. The method comprises reacting a RNA or analogue  
CC oligonucleotide with a phosphate addition agent to form a RNA or analogue  
CC mono-, di- or triphosphate, which is then capped. The presence of the cap  
CC is important for mRNA maturation, initiation of translation, and protects  
CC the mRNA against various RNases present in the cell. The capped RNA or  
CC analogue is an influenza endonuclease aptamer, useful for treating or  
CC preventing an influenza infection in an animal. The synthetic capped RNA  
CC







```
QY      2417 CTGTAAATACTGGTGCA 2433
Db      3 CTGTAAATACTGGATCA 19

RESULT 4566
AAZ00903
ID      AAZ00903 standard; DNA; 19 BP.
XX
AC      AAZ00903;
XX
AC      AAZ00903;
XX
DT      27-SEP-1999 (first entry)
XX
DE      Primer for PGI biallelic marker 99-221.
XX
KW      PGI gene; biallelic marker; PCR primer; PGI-related biallelic marker;
KW      cancer; prostate cancer; diagnosis; therapy; prostate specific antigen;
KW      PSA; human; ss.
XX
OS      Synthetic.
OS      Homo sapiens.
XX
PN      WO9932644-A2.
XX
PD      01-JUL-1999.
XX
PF      PGI gene; biallelic marker; PCR primer; PGI-related biallelic marker;
PF      cancer; prostate cancer; diagnosis; therapy; prostate specific antigen;
PF      PSA; human; ss.
XX
PR      22-DEC-1997; 97US-00996306.
PR      09-SEP-1998; 98US-0099658P.
XX
PA      (GEST ) GENSET.
XX
PI      Cohen D, Blumenfeld M, Chumakov I, Bougueleret L;
XX      WPI; 1999-405178/34.
XX
PT      Use of a prostate cancer associated gene and biallelic markers derived
PT      from it.
XX
PS      Example 6; Fig 6A; 385pp; English.
XX
CC      The invention relates to a mammalian PGI gene and protein, and a set of
CC      PGI biallelic markers. The PGI polynucleotide and biallelic markers are
CC      used in a hybridisation assay, a sequencing assay, or in an allele-
CC      specific amplification assay for determining the identity of a nucleotide
CC      at a PGI-related biallelic marker. The methods can be used to detect and
CC      to assess the risk of developing cancer or prostate cancer. Early-stage
CC      diagnosis of prostate cancer relies on prostate specific antigen (PSA)
CC      dosage. However, the effectiveness of this is limited due to its
CC      inability to discriminate between malignant and non-malignant affections
CC      of the organ. A need exists for both a reliable diagnostic procedure
CC      which would enable early-stage diagnosis, and for preventative and
CC      curative treatments of the disease. The PGI gene can be used for
CC      detection of prostate cancer, and the risk of developing it in the
CC      future, and can also be used to determine therapies for the disease
XX
SQ      Sequence 19 BP; 1 A; 7 C; 1 G; 10 T; 0 U; 0 Other;

      Query Match      0.5%; Score 13.8; DB 1; Length 19;
      Best Local Similarity 88.2%; Pred. No. 3.9e+03;
      Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      1920 CCTTTTTCAGTGTT 1936
      ||||| ||||| |||||
Db      2 CCTTTTTCAGTGTT 18

RESULT 4567
AAZ01223
ID      AAZ01223 standard; DNA; 19 BP.
XX
AC      AAZ01223;
XX
DT      06-AUG-2003 (revised)
DT      25-JUL-2000 (first entry)
XX
DE      Myrtaceae microsatellite scul27TT detection PCR primer.
XX
KW      Myrtaceae; microsatellite; isolation; genotyping; plant; tea tree;
KW      breeding; Melaleuca alternifolia; broad-spectrum germicidal oil;
KW      pharmaceutical; cosmetic; identification; detection; PCR primer; ss.
XX
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```
XX      27-SEP-1999 (first entry)
DT
XX      PCR primer for PGI biallelic marker 99-221-442.
DE
XX
KW      PGI gene; biallelic marker; PCR primer; PGI-related biallelic marker;
KW      cancer; prostate cancer; diagnosis; therapy; prostate specific antigen;
KW      PSA; human; ss.
XX
OS      Synthetic.
OS      Homo sapiens.
XX
PN      WO9932644-A2.
XX
PD      01-JUL-1999.
XX
PF      22-DEC-1998; 98WO-IB002133.
XX
PR      22-DEC-1997; 97US-00996306.
PR      09-SEP-1998; 98US-0099658P.
XX
PA      (GEST ) GENSET.
XX
PI      Cohen D, Blumenfeld M, Chumakov I, Bougueleret L;
XX      WPI; 1999-405178/34.
XX
PT      Use of a prostate cancer associated gene and biallelic markers derived
PT      from it.
XX
PS      Claim 4; Page 352; 385pp; English.
XX
CC      The invention relates to a mammalian PGI gene and protein, and a set of
CC      PGI biallelic markers. The PGI polynucleotide and biallelic markers are
CC      used in a hybridisation assay, a sequencing assay, or in an allele-
CC      specific amplification assay for determining the identity of a nucleotide
CC      at a PGI-related biallelic marker. The methods can be used to detect and
CC      to assess the risk of developing cancer or prostate cancer. Early-stage
CC      diagnosis of prostate cancer relies on prostate specific antigen (PSA)
CC      dosage. However, the effectiveness of this is limited due to its
CC      inability to discriminate between malignant and non-malignant affections
CC      of the organ. A need exists for both a reliable diagnostic procedure
CC      which would enable early-stage diagnosis, and for preventative and
CC      curative treatments of the disease. The PGI gene can be used for
CC      detection of prostate cancer, and the risk of developing it in the
CC      future, and can also be used to determine therapies for the disease
XX
SQ      Sequence 19 BP; 1 A; 7 C; 1 G; 10 T; 0 U; 0 Other;

      Query Match      0.5%; Score 13.8; DB 1; Length 19;
      Best Local Similarity 88.2%; Pred. No. 3.9e+03;
      Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      1920 CCTTTTTCAGTGTT 1936
      ||||| ||||| |||||
Db      2 CCTTTTTCAGTGTT 18

RESULT 4568
AAA35512/c
ID      AAA35512 standard; DNA; 19 BP.
XX
AC      AAA35512;
XX
DT      06-AUG-2003 (revised)
DT      25-JUL-2000 (first entry)
XX
DE      Myrtaceae microsatellite scul27TT detection PCR primer.
XX
KW      Myrtaceae; microsatellite; isolation; genotyping; plant; tea tree;
KW      breeding; Melaleuca alternifolia; broad-spectrum germicidal oil;
KW      pharmaceutical; cosmetic; identification; detection; PCR primer; ss.
XX
```

OS Myrtaceae.  
XX  
PN WO200017341-A1.  
XX  
PD 30-MAR-2000.  
XX  
PF 23-SEP-1999; 99WO-AU0000820.  
XX  
PR 23-SEP-1998; 98AU-00006099.  
XX  
PR 16-FEB-1999; 99AU-00008718.  
XX  
PA (BUSI-) BUSINESS & RES MANAGEMENT PTY LTD.  
XX  
PI Rossetto M, McIauchlan A, Harriss FCL, Henry RJ, Baverstock PR;  
PI Lee IS, Maguire TL, Edwards KJ;  
XX  
DR WPI; 2000-292840/25.  
XX  
PT Isolating microsatellites from Myrtaceae, useful for genotyping,  
PT particularly in breeding programs for tea tree, by reacting plant nucleic  
PT acid with immobilized oligonucleotides.  
XX  
PS Claim 10; Page 39; 100pp; English.  
XX  
CC A method has been developed of isolating a microsatellite (MS) from  
CC nucleic acid extract of a plant of Myrtaceae family. The method  
CC comprises: (i) treating the extract with one or more immobilised, single-  
CC stranded oligonucleotides (ON) having a consensus MS repeat sequence  
CC (MSRS) or its complement; (ii) washing under specified stringency  
CC conditions; (iii) eluting nucleic acid bound to ON; and (iv) sequencing  
CC the eluted nucleic acids to identify those containing an MSRS.  
CC Microsatellites (MS) isolated by the method, specifically from Melaleuca  
CC alternifolia (the tea tree, a source of a broad-spectrum germicidal oil,  
CC useful in pharmaceuticals and cosmetics), are useful as genotyping  
CC markers, particularly for breeding plants that produce the oil in higher  
CC yield or of better quality. Primers based on MS are useful for both inter  
CC - and intra-species genotyping. The selected washing conditions improve  
CC efficiency of recovery of microsatellites (MS) and reduce the number of  
CC washing stages required. Particularly about 86% of recovered sequence  
CC contain an MS repeat sequence, compared with 50-70% when the conventional  
CC washing procedure is followed. AAA35313 to AAA35357, and AAA35562 to  
CC AAA35575 represent nucleotide sequences from the present invention which  
CC contain microsatellite sequences. AAA35358 to AAA35561 represent  
CC oligonucleotide PCR primers used for identifying Myrtaceae microsatellite  
CC sequences. (Updated on 06-AUG-2003 to correct OS field.)  
XX  
SQ Sequence 19 BP; 0 A; 8 C; 2 G; 9 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 19;  
Best Local Similarity 88.2%; Pred. No. 3.9e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1497 AAATGGAGAAACACAGG 1513  
Db 19 AAAGGGAGAAACAGAGG 3  
RESULT 4569  
AAZ37261  
ID AAZ37261 standard; DNA; 19 BP.  
XX  
AC AAZ37261;  
XX  
DT 28-JAN-2000 (first entry)  
XX  
DE PCR primer for AV37 antigen coding sequence.  
XX  
KW AV37 antigen; monoclonal antibody; hybridoma AV37; vaccine; avian tumour;  
KW oncogenic avian virus; Marek's disease virus; avian leucosis virus;  
KW Rous-associated virus; reticuloendotheliosis virus; therapy; PCR primer;  
XX ss.  
OS Synthetic.

OS Gallus sp.  
XX  
PN WO9955860-A1.  
XX  
PD 04-NOV-1999.  
XX  
PF 22-APR-1999; 99WO-GB0001238.  
XX  
PR 29-APR-1998; 98GB-00009070.  
XX  
PA (ANIM-) INST ANIMAL HEALTH LTD.  
XX  
PI Burgess SC, Davison TF, Ross LUN;  
XX  
DR WPI; 2000-013437/01.  
XX  
PT New polypeptide, useful as a vaccine and to generate monoclonal  
PT antibodies.  
XX  
PS Claim 31; Page 39; 63pp; English.  
XX  
CC This sequence is a PCR primer for DNA encoding the AV37 antigen protein  
CC of the invention. The protein is recognised by a monoclonal antibody  
CC (Mab) secreted by the hybridoma AV37 deposited at the European Collection  
CC of Cell Cultures (ECACC) accession number 98030304. The polypeptide can  
CC be used to isolate a Mab, produce a hybridoma producing the Mab, and in a  
CC composition for use as a vaccine. The vaccine can be used against  
CC oncogenic avian viruses, including Marek's disease virus, avian leucosis  
CC virus, Rous-associated virus and reticuloendotheliosis virus. The vector  
CC can be used to treat avian tumours  
XX  
SQ Sequence 19 BP; 4 A; 8 C; 2 G; 5 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 19;  
Best Local Similarity 88.2%; Pred. No. 3.9e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1250 TTCACAGAACTTCTCAG 1266  
Db 3 TTCACACACCTTCTCAG 19  
RESULT 4570  
AAAB6469/c  
ID AAAB6469 standard; DNA; 19 BP.  
XX  
AC AAAB6469;  
XX  
DT 04-DEC-2000 (first entry)  
XX  
DE PCBA HH ribozyme binding site #201.  
XX  
KW Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.  
XX  
OS Mammalia.  
XX  
PN WO200032765-A2.  
XX  
PD 08-JUN-2000.  
XX  
PF 06-DEC-1999; 99WO-US028772.  
XX  
PR 04-DEC-1998; 98US-0110954P.  
XX  
PA (IMMJ-) IMMUSOL INC.  
XX  
PI Tritz R, Welch PJ, Barber JR, Robbins JM;  
XX  
DR WPI; 2000-412314/35.  
XX  
PT New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves  
PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,  
PT PCNA and Cyclin B1.

XX PS Disclosure; Page 108; 109pp; English.

XX CC The present invention relates to a hairpin or hammerhead ribozyme, designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1. Representative examples of ribozyme recognition sites are given in CC AAA82415 to AAA86787. The ribozyme of the invention is useful for CC inhibiting restenosis by introduction of the ribozyme into cells. The CC ribozyme is resistant to endonuclease activity and hence is efficient in CC restenosis treatment

XX SQ Sequence 19 BP; 2 A; 4 C; 0 G; 13 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 19;  
Best Local Similarity 88.2%; Pred. No. 3.9e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2779 AGAATTGAAAAA 2795  
||||| |||||||  
Db 18 AGAATAGAAAAA 2

RESULT 4571  
AAA84405/c  
ID AAA84405 standard; DNA; 19 BP.  
XX AAA84405;  
AC  
XX 04-DEC-2000 (first entry)  
DT  
XX Cyclin D3 ribozyme binding site #17.  
DE  
XX Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.  
KW Mammalia.  
XX  
OS  
XX WO200032765-A2.  
PN  
XX 08-JUN-2000.  
PD  
XX 06-DEC-1999; 99WO-US028772.  
PF  
XX 04-DEC-1998; 98US-0110954P.  
PR  
XX (IMMU-) IMMUSOL INC.  
PA  
XX Tritz R, Welch PJ, Barber JR, Robbins JM;  
PI  
XX WPI; 2000-412314/35.  
DR  
XX New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1, PCNA and Cyclin B1.  
PT  
XX Disclosure; Page 81; 109pp; English.

XX CC The present invention relates to a hairpin or hammerhead ribozyme, designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1. Representative examples of ribozyme recognition sites are given in CC AAA82415 to AAA86787. The ribozyme of the invention is useful for CC inhibiting restenosis by introduction of the ribozyme into cells. The CC ribozyme is resistant to endonuclease activity and hence is efficient in CC restenosis treatment

XX SQ Sequence 19 BP; 2 A; 8 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 19;  
Best Local Similarity 88.2%; Pred. No. 3.9e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1606 GGCTGGGGGAGAGTT 1622

Db 19 GGCCAGGGGGAAGACTT 3  
||||| ||||||| |||  
RESULT 4572  
AAA84723/c  
ID AAA84723 standard; DNA; 19 BP.  
XX  
XX AAA84723;  
AC  
XX 04-DEC-2000 (first entry)  
DT  
XX Cyclin E ribozyme binding site #256.  
DE  
XX Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.  
KW Mammalia.  
XX  
OS  
XX WO200032765-A2.  
PN  
XX 08-JUN-2000.  
PD  
XX 06-DEC-1999; 99WO-US028772.  
PF  
XX 04-DEC-1998; 98US-0110954P.  
PR  
XX (IMMU-) IMMUSOL INC.  
PA  
XX Tritz R, Welch PJ, Barber JR, Robbins JM;  
PI  
XX WPI; 2000-412314/35.  
DR  
XX New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1, PCNA and Cyclin B1.  
PT  
XX Disclosure; Page 81; 109pp; English.

XX CC The present invention relates to a hairpin or hammerhead ribozyme, designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1. Representative examples of ribozyme recognition sites are given in CC AAA82415 to AAA86787. The ribozyme of the invention is useful for CC inhibiting restenosis by introduction of the ribozyme into cells. The CC ribozyme is resistant to endonuclease activity and hence is efficient in CC restenosis treatment

XX SQ Sequence 19 BP; 1 A; 7 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 19;  
Best Local Similarity 88.2%; Pred. No. 3.9e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 208 CTGCGAGGATGCCACG 224  
||||| |||||||  
Db 17 CTGCGAGGAGAGCCACG 1

RESULT 4573  
AAA86472/c  
ID AAA86472 standard; DNA; 19 BP.  
XX  
XX AAA86472;  
AC  
XX 04-DEC-2000 (first entry)  
DT  
XX PCBA HH ribozyme binding site #204.  
DE  
XX Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.  
KW Mammalia.  
XX  
XX WO200032765-A2.



XX 08-JUN-2000.  
PD  
XX  
PF 06-DEC-1999; 99WO-US028772.  
XX  
PR 04-DEC-1998; 98US-0110954P.  
XX  
PA (IMMU-) IMMUSOL INC.  
PI Tritz R, Welch PJ, Barber JR, Robbins JM;  
XX WPI; 2000-412314/35.  
DR  
XX  
PT New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves  
PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,  
PT PCNA and Cyclin B1.  
XX  
PS Disclosure; Page 108; 109pp; English.  
XX  
CC The present invention relates to a hairpin or hammerhead ribozyme,  
CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase  
CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.  
CC Representative examples of ribozyme recognition sites are given in  
CC AAA82415 to AAA86787. The ribozyme of the invention is useful for  
CC inhibiting restenosis by introduction of the ribozyme into cells. The  
CC ribozyme is resistant to endonuclease activity and hence is efficient in  
CC restenosis treatment  
XX  
SQ Sequence 19 BP; 3 A; 6 C; 0 G; 10 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 19;  
Best Local Similarity 88.2%; Pred. No. 3.9e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1491 TGGAGAAAATGGAGAAA 1507  
Db 17 TGGAGAGAATAGAGAAA 1

RESULT 4574  
AAZ70580  
ID AAZ70580 standard; DNA; 19 BP.  
XX  
AC AAZ70580;  
XX  
DT 10-SEP-2001 (first entry)  
XX  
DE Human biallelic marker upstream amplification primer SEQ ID NO:4936.  
XX  
KW Human genome; biallelic marker; high density disequilibrium map;  
KW genomic map; haplotype; phenotype; polymorphic base; genotyping;  
KW haplotyping; hybridisation; identification; characterisation;  
KW amplification; single nucleotide polymorphism; SNP; PCR primer;  
KW diagnosis; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO9954500-A2.  
XX  
PD 28-OCT-1999.  
XX  
PF 21-APR-1999; 99WO-IB000822.  
XX  
PR 21-APR-1998; 98US-0082614P.  
PR 23-NOV-1998; 98US-0109732P.  
XX  
PA (GEST ) GENSET.  
XX  
PI Cohen D, Blumenfeld M, Chumakov I;  
XX  
XX WPI; 2000-013267/01.  
XX  
PT Novel biallelic markers used to construct a high density disequilibrium

PT map of the human genome.  
XX  
PS Claim 8; Page 1283; 2745pp; English.  
XX  
CC AAZ65654 to AAZ69578 represent human biallelic markers from the present  
CC invention, which contain a polymorphic base at position 24 of their  
CC nucleotide sequences. AAZ69579 to AAZ77440 represent amplification  
CC primers for the biallelic markers. The biallelic markers of the invention  
CC have a variety of uses: they can be used for high density mapping of the  
CC human genome, and in complex association studies and haplotyping studies  
CC which are useful in determining the genetic basis for disease states.  
CC Compositions and methods of the invention can also be useful for the  
CC identification of the targets for the development of pharmaceutical  
CC agents and diagnostic methods, as well as the characterisation of the  
CC differential efficacious responses to and side effects from  
CC pharmaceutical agents acting on a disease as well as other treatment.  
CC N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and  
CC 3367, are not actually given a sequence in the Sequence Listing from the  
CC present invention

SQ Sequence 19 BP; 4 A; 2 C; 5 G; 8 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 19;  
Best Local Similarity 88.2%; Pred. No. 3.9e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2709 TCTCTGCCTGTAATGT 2725  
Db 2 TATCTGCTTGTAAATGT 18

RESULT 4575  
AAZ73500  
ID AAZ73500 standard; DNA; 19 BP.

XX AAZ73500;  
XX  
DT 10-SEP-2001 (first entry)  
XX

Human biallelic marker upstream amplification primer SEQ ID NO:7856.

Human genome; biallelic marker; high density disequilibrium map;  
genomic map; haplotype; phenotype; polymorphic base; genotyping;  
haplotyping; hybridisation; identification; characterisation;  
amplification; single nucleotide polymorphism; SNP; PCR primer;  
diagnosis; ss.

XX Homo sapiens.  
OS  
XX WO9954500-A2.  
XX  
PD 28-OCT-1999.  
XX  
PF 21-APR-1999; 99WO-IB000822.  
XX  
PR 21-APR-1998; 98US-0082614P.  
PR 23-NOV-1998; 98US-0109732P.  
XX  
PA (GEST ) GENSET.

XX Cohen D, Blumenfeld M, Chumakov I;  
PI  
XX WPI; 2000-013267/01.  
XX  
PT Novel biallelic markers used to construct a high density disequilibrium  
PT map of the human genome.  
XX  
PS Example 13; Page 1905; 2745pp; English.

XX AAZ65654 to AAZ69578 represent human biallelic markers from the present  
CC invention, which contain a polymorphic base at position 24 of their  
CC nucleotide sequences. AAZ69579 to AAZ77440 represent amplification  
CC primers for the biallelic markers. The biallelic markers of the invention

CC have a variety of uses: they can be used for high density mapping of the  
CC human genome, and in complex association studies and haplotyping studies  
CC which are useful in determining the genetic basis for disease states.  
CC Compositions and methods of the invention can also be useful for the  
CC identification of the targets for the development of pharmaceutical  
CC agents and diagnostic methods, as well as the characterisation of the  
CC differential efficacious responses to and side effects from  
CC pharmaceutical agents acting on a disease as well as other treatment.  
CC N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and  
CC 3367, are not actually given a sequence in the Sequence Listing from the  
CC present invention  
XX

SQ Sequence 19 BP; 1 A; 7 C; 1 G; 10 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 19;  
Best Local Similarity 88.2%; Pred. No. 3.9e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1920 CCTTTTTCAGTGT 1936  
Db 2 CCTTTTCTTCACTGT 18

RESULT 4576

AAA75956  
ID AAA75956 standard; DNA; 19 BP.

XX AAA75956;

AC 08-FEB-2001 (first entry)

XX PCR primer used to amplify and modify a trypsin gene terminator.

DE Protein production; promoter; hormone; receptor; antibody;  
XX trypsin terminator; PCR primer; ss.

KW Fusarium oxysporum.

XX WO200056900-A2.

PN 28-SEP-2000.

XX 22-MAR-2000; 2000WO-US007815.

PF 22-MAR-1999; 99US-00274449.

XX (NOVO ) NOVO NORDISK BIOTECH INC.

PI Berka RM, Rey MW, Brown K, Brown SH;

XX WPI; 2000-638265/61.

PT Promoters useful for expressing heterologous genes and producing  
PT polypeptides such as hormones, receptors, antibodies or enzymes in a  
PT fungal cell.

XX Example 13; Page 43; 104pp; English.

CC PCR primers AAA75956-57 were used to amplify a trypsin gene terminator.  
CC The amplified promoter sequence is useful for constructing plasmids for  
CC the production of a polypeptide, preferably a hormone, receptor,  
CC antibody, a reporter or an enzyme selected from oxidoreductase,  
CC transferase, hydrolase, lyase, isomerase or ligase, in particular  
CC aminopeptidase, amylase, cutinase, cyclodextrin glycosyl transferase,  
CC cellulase, chitinase, esterase, alpha-galactosidase, beta-galactosidase,  
CC deoxyribonuclease, glucosidase, beta-glucosidase, invertase, laccase,  
CC lipase, mannosidase, mutanase, oxidase, a pectinolytic enzyme,  
CC peroxidase, phytase, polyphenoloxidase, proteolytic enzyme, ribonuclease,  
CC transglutaminase or xylanase, in fungal host cells

XX Sequence 19 BP; 5 A; 4 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 19;  
Best Local Similarity 88.2%; Pred. No. 3.9e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 19 GTGTCCAGTGACCCGGA 35  
Db 1 GTGTGCAGTGACCCAGA 17

RESULT 4577

AAH61634/c  
ID AAH61634 standard; DNA; 19 BP.

XX AAH61634;

AC 10-SEP-2001 (first entry)

DT PCNA HH ribozyme binding site SEQ ID NO:4058.

XX Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;  
KW recognition site; target; ribozyme binding site; eye disease; vulnery;  
KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;  
KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;  
KW matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;  
KW antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;  
KW antisickling; ophthalmological; keratolytic; gene therapy; viral wart;  
KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;  
KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;  
KW sickle cell retinopathy; ss.

XX Homo sapiens.

OS Synthetic.

XX WO200130362-A2.

XX 03-MAY-2001.

PF 26-OCT-2000; 2000WO-US029500.

XX 26-OCT-1999; 99US-0161532P.

PA (IMMU-) IMMUSOL INC.

XX Robbins JM, Tritz R;

PI WPI; 2001-300427/31.

XX Treating proliferative skin or eye diseases and scarring, using ribozymes  
PT that cleave RNA encoding cytokines involved in inflammation, matrix  
PT metalloproteinases, growth factors and cell-cycle dependent kinases.

XX Example 1; Page 367; 408pp; English.

XX The present invention describes a method for treating a proliferative  
CC skin or eye disease and scarring. The method involves administering a  
CC ribozyme (I) which cleaves RNA encoding a cytokine involved in  
CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle  
CC dependent kinase, growth factor or a reductase, or administering a  
CC nucleic acid molecule (II) comprising a promoter operably linked to a  
CC dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,  
CC ophthalmological, vulnery, keratolytic and virucide activities, and  
CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used  
CC in gene therapy. (I) and (II) are useful for treating proliferative skin  
CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,  
CC squamous or basal cell carcinoma and viral or seborrheic wart. They can  
CC also be used for treating proliferative eye diseases such as diabetic  
CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of  
CC prematurity and retinal detachment, and for treating and preventing  
CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn  
CC scar. AAH57577 to AAH62099 represent sequences used in the  
CC exemplification of the present invention

SQ Sequence 19 BP; 3 A; 6 C; 0 G; 10 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 19;  
Best Local Similarity 88.2%; Pred. No. 3.9e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1491 TGGAGAAAATGGAGAAA 1507  
Db 17 TGGAGAGAAATAGAGAAA 1  
RESULT 4578  
AAH61631/c  
ID AAH61631 standard; DNA; 19 BP.  
XX  
AC AAH61631;  
XX  
DT 10-SEP-2001 (first entry)  
XX  
DE PCNA HH ribozyme binding site SEQ ID NO:4055.  
XX  
KW Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;  
KW recognition site; target; ribozyme binding site; eye disease; vulneryary;  
KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;  
KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;  
KW matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;  
KW antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;  
KW antiscikling; ophthalmological; keratolytic; gene therapy; viral wart;  
KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;  
KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;  
KW sickle cell retinopathy; ss.  
XX  
OS Homo sapiens.  
OS Synthetic.  
XX  
PN WO200130362-A2.  
XX  
PD 03-MAY-2001.  
XX  
PF 26-OCT-2000; 2000WO-US029500.  
XX  
PR 26-OCT-1999; 99US-0161532P.  
XX  
PA (IMMU-) IMMUSOL INC.  
XX  
PI Robbins JM, Tritz R;  
XX  
DR WPI; 2001-300427/31.  
XX  
PT Treating proliferative skin or eye diseases and scarring, using ribozymes  
PT that cleave RNA encoding cytokines involved in inflammation, matrix  
PT metalloproteinases, growth factors and cell-cycle dependent kinases.  
XX  
PS Example 1; Page 366; 408pp; English.  
XX  
CC The present invention describes a method for treating a proliferative  
CC skin or eye disease and scarring. The method involves administering a  
CC ribozyme (I) which cleaves RNA encoding a cytokine involved in  
CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle  
CC dependent kinase, growth factor or a reductase, or administering a  
CC nucleic acid molecule (II) comprising a promoter operably linked to a  
CC nucleic acid segment encoding (I). (I) can have antipsoriatic,  
CC dermatological, cytostatic, antiseborrheic, antidiabetic, antiscikling,  
CC ophthalmological, vulneryary, keratolytic and virucide activities, and  
CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used  
CC in gene therapy. (I) and (II) are useful for treating proliferative skin  
CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,  
CC squamous or basal cell carcinoma and viral or seborrheic wart. They can  
CC also be used for treating proliferative eye diseases such as diabetic  
CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of  
CC prematurity and retinal detachment, and for treating and preventing  
CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn  
CC scar. AAH57577 to AAH62099 represent sequences used in the

CC exemplification of the present invention  
XX  
SQ Sequence 19 BP; 2 A; 4 C; 0 G; 13 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 19;  
Best Local Similarity 88.2%; Pred. No. 3.9e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 2779 AGAATTGAAAAAAA 2795  
Db 18 AGAATAGAGAAAAAAA 2  
RESULT 4579  
AAH59885/c  
ID AAH59885 standard; DNA; 19 BP.  
XX  
AC AAH59885;  
XX  
DT 10-SEP-2001 (first entry)  
XX  
DE Cyclin E ribozyme binding site SEQ ID NO:2309.  
XX  
KW Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;  
KW recognition site; target; ribozyme binding site; eye disease; vulneryary;  
KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;  
KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;  
KW matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;  
KW antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;  
KW antiscikling; ophthalmological; keratolytic; gene therapy; viral wart;  
KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;  
KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;  
KW sickle cell retinopathy; ss.  
XX  
OS Homo sapiens.  
OS Synthetic.  
XX  
PN WO200130362-A2.  
XX  
PD 03-MAY-2001.  
XX  
PF 26-OCT-2000; 2000WO-US029500.  
XX  
PR 26-OCT-1999; 99US-0161532P.  
XX  
PA (IMMU-) IMMUSOL INC.  
XX  
PI Robbins JM, Tritz R;  
XX  
DR WPI; 2001-300427/31.  
XX  
PT Treating proliferative skin or eye diseases and scarring, using ribozymes  
PT that cleave RNA encoding cytokines involved in inflammation, matrix  
PT metalloproteinases, growth factors and cell-cycle dependent kinases.  
XX  
PS Example 1; Page 239; 408pp; English.  
XX  
CC The present invention describes a method for treating a proliferative  
CC skin or eye disease and scarring. The method involves administering a  
CC ribozyme (I) which cleaves RNA encoding a cytokine involved in  
CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle  
CC dependent kinase, growth factor or a reductase, or administering a  
CC nucleic acid molecule (II) comprising a promoter operably linked to a  
CC nucleic acid segment encoding (I). (I) can have antipsoriatic,  
CC dermatological, cytostatic, antiseborrheic, antidiabetic, antiscikling,  
CC ophthalmological, vulneryary, keratolytic and virucide activities, and  
CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used  
CC in gene therapy. (I) and (II) are useful for treating proliferative skin  
CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,  
CC squamous or basal cell carcinoma and viral or seborrheic wart. They can  
CC also be used for treating proliferative eye diseases such as diabetic  
CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of  
CC prematurity and retinal detachment, and for treating and preventing  
CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn  
CC scar. AAH57577 to AAH62099 represent sequences used in the



CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn  
CC scar. AAH57577 to AAH62099 represent sequences used in the  
CC exemplification of the present invention  
XX  
SQ Sequence 19 BP; 1 A; 7 C; 6 G; 5 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 19;  
Best Local Similarity 88.2%; Pred. No. 3.9e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 208 CTGCGAGGATCGCCACG 224  
Db 17 CTGCGAGGAGGCCACG 1  
RESULT 4580  
AAH59567/C  
ID AAH59567 standard; DNA; 19 BP.  
XX  
AC AAH59567;  
XX  
DT 10-SEP-2001 (first entry)  
XX  
DE Cyclin D3 ribozyme binding site SEQ ID NO:1991.  
XX  
KW Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;  
KW recognition site; target; ribozyme binding site; eye disease; vulnery;  
KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;  
KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;  
KW matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;  
KW antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;  
KW antiskinning; ophthalmological; keratolytic; gene therapy; viral wart;  
KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;  
KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;  
KW sickle cell retinopathy; ss.  
XX  
OS Homo sapiens.  
OS Synthetic.  
XX  
PN WO200130362-A2.  
XX  
PD 03-MAY-2001.  
XX  
PF 26-OCT-2000; 2000WO-US029500.  
XX  
PR 26-OCT-1999; 99US-0161532P.  
XX  
PA (IMMU-) IMMUSOL INC.  
PI Robbins JM, Tritz R;  
XX  
DR WPI; 2001-300427/31.  
XX  
PT Treating proliferative skin or eye diseases and scarring, using ribozymes  
PT that cleave RNA encoding cytokines involved in inflammation, matrix  
PT metalloproteinases, growth factors and cell-cycle dependent kinases.  
PS Example 1; Page 216; 408pp; English.  
XX  
CC The present invention describes a method for treating a proliferative  
CC skin or eye disease and scarring. The method involves administering a  
CC ribozyme (I) which cleaves RNA encoding a cytokine involved in  
CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle  
CC dependent kinase, growth factor or a reductase, or administering a  
CC nucleic acid molecule (II) comprising a promoter operably linked to a  
CC nucleic acid segment encoding (I). (I) can have antipsoriatic,  
CC dermatological, cytostatic, antiseborrheic, antidiabetic, antiskinning,  
CC ophthalmological, vulnery, keratolytic and virucide activities, and  
CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used  
CC in gene therapy. (I) and (II) are useful for treating proliferative skin  
CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,  
CC squamous or basal cell carcinoma and viral or seborrheic wart. They can  
CC also be used for treating proliferative eye diseases such as diabetic

CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of  
CC prematurity and retinal detachment, and for treating and preventing  
CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn  
CC scar. AAH57577 to AAH62099 represent sequences used in the  
CC exemplification of the present invention  
XX  
SQ Sequence 19 BP; 2 A; 8 C; 5 G; 4 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 19;  
Best Local Similarity 88.2%; Pred. No. 3.9e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1606 GGCTGGGGGAGAGTT 1622  
Db 19 GGCCAGGGGAGACTT 3  
RESULT 4581  
ABK41301  
ID ABK41301 standard; DNA; 19 BP.  
XX  
AC ABK41301;  
XX  
DT 21-MAY-2002 (first entry)  
XX  
DE Human prostate cancer-associated marker upstream PCR primer #8.  
XX  
KW Human; obesity associated-biallelic marker; ss; prostate cancer; primer;  
KW drug response; hyperuricaemia; digestive pathology; hypertension; cancer;  
KW hepatic function disorder; cardiovascular disease; hyperlipidaemia; PCR;  
KW insulin disorder; atheromatous disease; cardiac insufficiency; obesity.  
XX  
OS Homo sapiens.  
XX  
PN WO200206525-A2.  
XX  
PD 24-JAN-2002.  
XX  
PF 28-JUN-2001; 2001WO-IB001477.  
XX  
PR 18-JUL-2000; 2000US-0219704P.  
XX  
PA (GEST ) GENSET.  
XX  
PI Cohen D, Blumenfeld M, Chumakov I, Abderrahim H, Bihain B;  
XX  
DR WPI; 2002-155043/20.  
XX  
PT Set of novel map-related biallelic markers, preferably located on obesity  
PT disorder-associated chromosomal regions on chromosomes 3, 10 and 19,  
PT useful, for e.g. detecting statistical correlations between marker allele  
PT and a phenotype.  
XX  
PS Example 20; Page 305; 311pp; English.  
XX  
CC The invention relates to a set of novel map-related biallelic markers,  
CC preferably located on obesity disorder-associated chromosomal regions on  
CC chromosomes 3, 10 and 19. The markers are useful for genotyping or  
CC estimating the frequency of an allele in a population, for detecting an  
CC association between a genotype or haplotype and a phenotype, e.g. a  
CC disease involving drug responses, obesity or disorders related to  
CC obesity, such as hyperuricaemia, digestive pathology, hepatic function  
CC disorders, cancer, cardiovascular disease, hypertension, hyperlipidaemia,  
CC insulin disorders, atheromatous disease and cardiac insufficiency. The  
CC markers are useful for detecting a statistical correlation between a  
CC biallelic marker allele and a phenotype and/or between a biallelic marker  
CC haplotype and a phenotype. This sequence represents a PCR primer used to  
CC amplify a human prostate cancer-associated biallelic marker  
XX  
SQ Sequence 19 BP; 1 A; 7 C; 1 G; 10 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 19;  
Best Local Similarity 88.2%; Pred. No. 3.9e+03;



Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1920 CCTTTTTCAGTGTT 1936  
|||||  
Db 2 CCTTTTCTTCACTGTT 18

RESULT 4582  
AAL42341  
ID AAL42341 standard; DNA; 19 BP.  
XX  
AC AAL42341;  
XX  
DT 28-JUN-2002 (first entry)  
XX  
DE Novel sand pear microsatellite DNA PCR primer 5.  
XX  
KW Sand pear; ss; PCR; primer; novel microsatellite DNA sequence;  
KW Pyrus plant discrimination.  
XX  
OS Pyrus pyrifolia.  
XX  
PN JP2002034597-A.  
XX  
PD 05-FEB-2002.  
XX  
PF 21-JUL-2000; 2000JP-00220339.  
XX  
PR 21-JUL-2000; 2000JP-00220339.  
XX  
PA (DOKU-) DOKURITSU GYOSEI HOJIN NOGYO SEIBUTSU SH.  
XX  
DR WPI; 2002-298819/34.  
XX  
PT A new microsatellite DNA derived from a Pyrus plant and discrimination of  
PT Pyrus plants by using it.  
XX  
PS Claim 9; Page 6; 22pp; Japanese.  
XX  
CC The invention comprises a novel microsatellite DNA sequence derived from  
CC Pyrus plants. The invention also comprises a method for discriminating  
CC Pyrus plants - utilising the novel Pyrus microsatellite DNA. The novel  
CC microsatellite DNA sequence can be used in discriminating Pyrus plants.  
CC The present DNA sequence represents a PCR primer specific for a novel  
CC Pyrus pyrifolia (sand pear) microsatellite DNA sequence  
XX  
SQ Sequence 19 BP; 8 A; 1 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB-1; Length 19;  
Best Local Similarity 88.2%; Pred. No. 3.9e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 173 TGGAAAATAACCGATAA 189  
|||||  
Db 2 TGGAGAATAACTGATAA 18

RESULT 4583  
ABK49173  
ID ABK49173 standard; DNA; 19 BP.  
XX  
AC ABK49173;  
XX  
DT 02-JUL-2002 (first entry)  
XX  
DE F. oxysporum trypsin promoter PCR primer #5.  
XX  
KW Glucoamylase; ss; PCR; promoter; foreign gene expression; trypsin;  
KW primer; pDM194; pDM218.  
XX  
OS Fusarium oxysporum.  
XX  
PN US6361973-B1.

XX 26-MAR-2002.  
PD  
XX  
PF 22-MAR-2000; 2000US-00534407.  
XX  
PR 22-MAR-1999; 99US-00274449.  
PR 22-JUL-1999; 99US-0145339P.  
XX  
XX (NOVO ) NOVOZYMES BIOTECH INC.  
PA  
XX Berka RM, Rey MW, Brown K, Brown SH;  
XX WPI; 2002-350392/38.  
XX  
PT Novel Fusarium venenatum promoters, useful for expressing genes in a  
PT fungal cell.  
XX  
PS Example 13; Col 30; 57pp; English.  
XX  
CC The invention relates to a novel promoter sequence from the F. venenatum  
CC glucoamylase gene, a subsequence of the promoter that retains promoter  
CC activity or a nucleic acid sequence that hybridises under medium  
CC stringency conditions with the promoter. Also included are a method of  
CC producing a polypeptide comprising cultivating a fungal host cell in a  
CC medium, where the fungal host cell comprises a first nucleic acid  
CC sequence encoding the polypeptide operably linked to a second nucleic  
CC acid sequence comprising a promoter foreign to the first nucleic acid  
CC sequence, where the promoter comprises a nucleic acid sequence selected  
CC from the F. venenatum glucoamylase promoter, a subsequence of the  
CC promoter that retains promoter activity and a nucleic acid sequence that  
CC hybridises under medium stringency conditions with the promoter and  
CC isolating the polypeptide from the cultivation medium. The promoter is  
CC useful for expressing genes in a fungal cell. Expression of a lipase  
CC reporter gene in Fusarium venenatum when operably linked to the promoter  
CC showed higher levels of lipase activity than a Fusarium oxysporum trypsin  
CC promoter. Also disclosed are two novel genes designated Daria (a secreted  
CC protein) and Quinn (a vacuolar associated protein). The present sequence  
CC is a PCR primer used to clone the F. oxysporum trypsin promoter from  
CC plasmid pDM194 for creation of plasmid pDM218, an intermediate plasmid in  
CC the construction of an expression vector used to compare the expression  
CC levels of lipase under the control of the trypsin promoter or the  
CC glucoamylase promoter of the invention  
XX  
SQ Sequence 19 BP; 5 A; 4 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 19;  
Best Local Similarity 88.2%; Pred. No. 3.9e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 19 GTGTCCAGTGACCCGGA 35  
|||||  
Db 1 GTGTGCAGTGACCCAGA 17

RESULT 4584  
ABK90099  
ID ABK90099 standard; DNA; 19 BP.  
XX  
AC ABK90099;  
XX  
DT 29-NOV-2002 (first entry)  
XX  
DE Oestrogen response element (ERE), oligonucleotide probe #1.  
XX  
KW Human; modifying cellular sensitivity; genotoxic stress; BRCAL;  
KW tumour suppressor protein; stress-activated intracellular kinase; Cds1;  
KW genotoxin-induced cellular DNA damage; ultraviolet light;  
KW ionising radiation; chemotherapy agent; anthracycline; cisplatin;  
KW cyclophosphamide; Z47 protein; aging; cancer; heart failure; cytostatic;  
KW oestrogen response element; ERE; probe; ss.  
XX  
OS Homo sapiens.  
XX



CC associated cachexia, neurodegenerative disorders (e.g. Alzheimer's  
CC disease or Parkinson's disease), immune disorders, haematopoietic  
CC disorders, dyslipidaemias, and wasting disorders associated with chronic  
CC diseases. These may also be used to screen for molecules which inhibit or  
CC enhance NOVX activity or function, and for detecting specific cell types.  
CC These may also be used in chromosome mapping, gene therapy, tissue  
CC typing, and in forensic biology. The present sequence is a reverse  
CC transcriptase (RT)-PCR primer used to assess the tissue specific  
CC expression of mRNA encoding a NOVX protein

XX Sequence 19 BP; 4 A; 2 C; 7 G; 6 T; 0 U; 0 Other;  
SQ

Query Match 0.5%; Score 13.8; DB 1; Length 19;  
Best Local Similarity 88.2%; Pred. No. 3.9e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2479 CTTTAAATGGTGATGGG 2495  
Db 1 CCTTTGATGGTGATGGG 17

RESULT 4586  
ACD06722  
ID ACD06722 standard; DNA; 19 BP.  
XX ACD06722;  
XX  
DT 06-AUG-2003 (first entry)  
DE Forward RT-PCR primer for human NOV360 set 2.  
XX Human; ss; PCR; NOVX; cardiomyopathy; atherosclerosis; hypertension;  
KW congenital heart defect; prostate cancer; diabetes; metabolic disorder;  
KW neoplasm; graft versus host disease; AIDS; bronchial asthma; primer;  
KW Crohn's disease; multiple sclerosis; infectious disease; anorexia;  
KW cancer-associated cachexia; neurodegenerative disorder; RT-PCR;  
KW Alzheimer's disease; Parkinson's disease; immune disorder;  
KW haematopoietic disorder; dyslipidaemia; wasting disorder; gene therapy;  
KW reverse transcriptase PCR.

OS Homo sapiens.  
XX  
XX WO2003023008-A2.  
XX  
XX 20-MAR-2003.  
XX  
XX 09-SEP-2002; 2002WO-US028596.  
XX  
XX 07-SEP-2001; 2001US-0318120P.  
XX 07-SEP-2001; 2001US-0318130P.  
XX 10-SEP-2001; 2001US-0318430P.  
XX 12-SEP-2001; 2001US-0318765P.  
XX 17-SEP-2001; 2001US-0322781P.  
XX 17-SEP-2001; 2001US-0322816P.  
XX 19-SEP-2001; 2001US-0323519P.  
XX 20-SEP-2001; 2001US-0323631P.  
XX 20-SEP-2001; 2001US-0323636P.  
XX 25-SEP-2001; 2001US-0324969P.  
XX 25-SEP-2001; 2001US-0325091P.  
XX 26-SEP-2001; 2001US-0324990P.  
XX 15-FEB-2002; 2002US-0357303P.  
XX 28-FEB-2002; 2002US-0360973P.  
XX 20-MAR-2002; 2002US-0366131P.  
XX 25-MAR-2002; 2002US-0367753P.  
XX 02-APR-2002; 2002US-0369479P.  
XX 10-MAY-2002; 2002US-0379532P.  
XX 17-MAY-2002; 2002US-0381664P.  
XX 17-MAY-2002; 2002US-0381672P.  
XX 28-MAY-2002; 2002US-0383651P.  
XX 29-MAY-2002; 2002US-0384012P.  
XX 19-JUN-2002; 2002US-0390155P.  
XX 06-SEP-2002; 2002US-00390155.

(CURA-) CURAGEN CORP.  
PA Zhong M, Li L, Gorman L, Spytek KA, Kekuda R, Taupier RJ;  
XX Anderson DW, Vernet CAM, Catterton E, Miller CE, Shenoy SG;  
PI Patturajan M, Pena CEA, Tchernev VT, Padigar M, Gusev VY;  
PI Malyankar UM, Burgess CE, Gerlach VL, Casman SJ, Rieger DK;  
PI Grosse WM, Smithson G, Peyman JA, Starling G, Rothenberg ME;  
PI Larochelelle WJ, Shimkets RA, Crabtree J, Rastelli L, Voss EZ;  
PI Boldog FL, Edinger SR, Millet I, Macdougall JR, Ellerman K;  
PI Chapoval A;  
XX  
DR WPI; 2003-313246/30.  
XX  
XX New polypeptides and polynucleotides having properties related to  
PT stimulation of biochemical or physiological responses in a cell or  
PT tissue, useful for diagnosing or preventing e.g. atherosclerosis,  
PT hypertension, prostate cancer.  
XX  
PS Example C; Page 712; 849pp; English.  
XX  
CC The invention relates to an isolated polypeptide comprising one of 127  
CC sequences (appearing as ABO1288-ABO1414) designated as NOVX, a mature  
CC form of NOVX, an amino acid sequence which is at least 95% identical to  
CC NOVX or an amino acid sequence comprising one or more conservative  
CC substitutions in NOVX. Also included are nucleic acids encoding NOVX  
CC proteins, determining the presence or amount of NOVX or NOVX DNA in a  
CC sample (by introducing the sample to an antibody that binds  
CC immunospecifically to the polypeptide, and determining the presence or  
CC amount of antibody bound to the polypeptide), determining the presence of  
CC or predisposition to a disease associated with altered levels of  
CC expression of NOVX or NOVX DNA in a first mammalian subject, identifying  
CC an agent that binds to NOVX, identifying a potential therapeutic agent  
CC for treatment of a pathology related to aberrant expression or aberrant  
CC physiological interactions of NOVX, screening for a modulator of activity  
CC of or of latency or predisposition to a pathology associated with NOVX, a  
CC vector comprising NOVX DNA, a cell comprising the vector (used to produce  
CC NOVX) and an anti-NOVX antibody. The NOVX nucleic acids and polypeptides  
CC are useful as a marker for cell or tissue type, and in diagnosing and  
CC treating pathologies, diseases, conditions or disorders associated with  
CC NOVX sequences, including cardiomyopathy, atherosclerosis, hypertension,  
CC congenital heart defects, prostate cancer, diabetes, metabolic disorders,  
CC neoplasm, graft versus host disease, AIDS, bronchial asthma, cancer-  
CC disease, multiple sclerosis, infectious diseases, anorexia, cancer-  
CC associated cachexia, neurodegenerative disorders (e.g. Alzheimer's  
CC disease or Parkinson's disease), immune disorders, haematopoietic  
CC disorders, dyslipidaemias, and wasting disorders associated with chronic  
CC diseases. These may also be used to screen for molecules which inhibit or  
CC enhance NOVX activity or function, and for detecting specific cell types.  
CC These may also be used in chromosome mapping, gene therapy, tissue  
CC typing, and in forensic biology. The present sequence is a reverse  
CC transcriptase (RT)-PCR primer used to assess the tissue specific  
CC expression of mRNA encoding a NOVX protein

XX Sequence 19 BP; 4 A; 2 C; 7 G; 6 T; 0 U; 0 Other;  
SQ

Query Match 0.5%; Score 13.8; DB 1; Length 19;  
Best Local Similarity 88.2%; Pred. No. 3.9e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2479 CTTTAAATGGTGATGGG 2495  
Db 1 CCTTTGATGGTGATGGG 17

RESULT 4587  
ADA25723/C  
ID ADA25723 standard; RNA; 19 BP.  
XX  
AC ADA25723;  
XX  
DT 20-NOV-2003 (first entry)  
XX  
DE Human REL-A short interfering nucleic acid SEQ ID NO:71.



XX short interfering nucleic acid; siNA; nuclear factor kappa B; NF-kappaB;  
KW RNA interference; vasotropic; nootropic; antiparkinsonian;  
KW neuroprotective; cytostatic; antiinflammatory; antiallergic; virucide;  
KW anti-HIV; immunosuppressive; anticonvulsant; nephrotropic; gene therapy;  
KW modulation; inhibition; restenosis; central nervous system lesion;  
KW Alzheimer's disease; Parkinson's disease; Huntington's disease; epilepsy;  
KW dementia; amyotrophic lateral sclerosis; cancer;  
KW polycystic kidney disease; inflammatory disease; allergic disease;  
KW viral infection; HIV; autoimmune disease; transplant rejection; ribozyme;  
KW human; v-rel reticuloendotheliosis viral oncogene homologue A; REL-A;  
KW nuclear factor; ss.  
XX  
OS Synthetic.  
OS Homo sapiens.  
XX  
PN WO2003070970-A2.  
XX  
PD 28-AUG-2003.  
XX  
PF 20-FEB-2003; 2003WO-US004951.  
XX  
PR 20-FEB-2002; 2002US-0358580P.  
PR 11-MAR-2002; 2002US-0363124P.  
PR 06-JUN-2002; 2002US-0386782P.  
PR 29-AUG-2002; 2002US-0406784P.  
PR 05-SEP-2002; 2002US-0408378P.  
PR 09-SEP-2002; 2002US-0409293P.  
PR 15-JAN-2003; 2003US-0440129P.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
XX  
XX  
PI Mcswiggen J, Beigelman L;  
XX  
DR WPI; 2003-689788/65.  
XX  
PT New short interfering nucleic acid downregulates expression of the NF-  
PT kappaB gene useful e.g. for treatment and diagnosis of cancer and  
PT inflammation.  
XX  
PS Example 3; Page 128; 149pp; English.  
XX  
CC The present invention describes a short interfering nucleic acid (siNA)  
CC that downregulates expression of a nuclear factor kappa B (NF-kappaB)  
CC gene by RNA interference. Also described: (1) kits for in vitro or in  
CC vivo delivery of siNA; (2) conjugates and/or complexes of siNA; and (3)  
CC vectors that express siNA. The siNAs have vasotropic, nootropic,  
CC antiparkinsonian, neuroprotective, cytostatic, antiinflammatory,  
CC antiallergic, virucide, anti-HIV, immunosuppressive, anticonvulsant and  
CC nephrotropic activities, and can be used in gene therapy, and for the  
CC modulation (inhibition) of expression or activity of NF-kappaB by RNA  
CC interference (siNA target mRNA, RNA splice variants, post-  
CC transcriptionally modified RNA, pre-RNA and/or RNA templates). The siNA  
CC sequences can be used to modulate expression of NF-kappaB genes, in  
CC cells, tissue explants or organisms, e.g. by ex vivo gene therapy, in  
CC grafts and transplants for treating restenosis and central nervous system  
CC lesions and injuries (Alzheimer's, Parkinson's or Huntington's diseases,  
CC epilepsy, dementia or amyotrophic lateral sclerosis) or for treating many  
CC cancers, other proliferative diseases (restenosis and polycystic kidney  
CC disease), inflammatory and/or allergic diseases, viral infections  
CC (including HIV), autoimmune diseases and transplant rejection, and also  
CC for drug screening; diagnosis; target identification and validation;  
CC genetic engineering; pharmacogenomics; studying gene function and gene  
CC mapping (e.g. of single-nucleotide polymorphisms). The present sequence  
CC represents human v-rel reticuloendotheliosis viral oncogene homologue A  
CC (REL-A) siNA, which is used in the exemplification of the present  
CC invention. REL-A is a nuclear factor of the kappa light polypeptide gene  
CC enhancer in B-cells.  
XX  
SQ Sequence 19 BP; 3 A; 12 C; 3 G; 0 T; 1 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 19;  
Best Local Similarity 88.2%; Pred. No. 3.9e+03;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
Qy 106 GCTTGGGGGCTGGGGG 122  
Db 19 GCTTGGGGGCGAGTTGGG 3  
RESULT 4588  
ADA26072  
ID ADA26072 standard; RNA; 19 BP.  
XX  
AC ADA26072;  
XX  
XX 20-NOV-2003 (first entry)  
DT  
XX Human REL-A short interfering nucleic acid SEQ ID NO:207.  
DE  
XX short interfering nucleic acid; siNA; nuclear factor kappa B; NF-kappaB;  
KW RNA interference; vasotropic; nootropic; antiparkinsonian;  
KW neuroprotective; cytostatic; antiinflammatory; antiallergic; virucide;  
KW anti-HIV; immunosuppressive; anticonvulsant; nephrotropic; gene therapy;  
KW modulation; inhibition; restenosis; central nervous system lesion;  
KW Alzheimer's disease; Parkinson's disease; Huntington's disease; epilepsy;  
KW dementia; amyotrophic lateral sclerosis; cancer;  
KW polycystic kidney disease; inflammatory disease; allergic disease;  
KW viral infection; HIV; autoimmune disease; transplant rejection; ribozyme;  
KW human; v-rel reticuloendotheliosis viral oncogene homologue A; REL-A;  
KW nuclear factor; ss.  
XX  
OS Synthetic.  
OS Homo sapiens.  
XX  
PN WO2003070970-A2.  
XX  
PD 28-AUG-2003.  
XX  
XX 20-FEB-2003; 2003WO-US004951.  
XX  
PR 20-FEB-2002; 2002US-0358580P.  
PR 11-MAR-2002; 2002US-0363124P.  
PR 06-JUN-2002; 2002US-0386782P.  
PR 29-AUG-2002; 2002US-0406784P.  
PR 05-SEP-2002; 2002US-0408378P.  
PR 09-SEP-2002; 2002US-0409293P.  
PR 15-JAN-2003; 2003US-0440129P.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
XX  
XX Mcswiggen J, Beigelman L;  
PI  
XX WPI; 2003-689788/65.  
XX  
PT New short interfering nucleic acid downregulates expression of the NF-  
PT kappaB gene useful e.g. for treatment and diagnosis of cancer and  
PT inflammation.  
XX  
PS Example 3; Page 128; 149pp; English.  
XX  
CC The present invention describes a short interfering nucleic acid (siNA)  
CC that downregulates expression of a nuclear factor kappa B (NF-kappaB)  
CC gene by RNA interference. Also described: (1) kits for in vitro or in  
CC vivo delivery of siNA; (2) conjugates and/or complexes of siNA; and (3)  
CC vectors that express siNA. The siNAs have vasotropic, nootropic,  
CC antiparkinsonian, neuroprotective, cytostatic, antiinflammatory,  
CC antiallergic, virucide, anti-HIV, immunosuppressive, anticonvulsant and  
CC nephrotropic activities, and can be used in gene therapy, and for the  
CC modulation (inhibition) of expression or activity of NF-kappaB by RNA  
CC interference (siNA target mRNA, RNA splice variants, post-  
CC transcriptionally modified RNA, pre-RNA and/or RNA templates). The siNA  
CC sequences can be used to modulate expression of NF-kappaB genes, in  
CC cells, tissue explants or organisms, e.g. by ex vivo gene therapy, in  
CC grafts and transplants for treating restenosis and central nervous system  
CC lesions and injuries (Alzheimer's, Parkinson's or Huntington's diseases,  
CC epilepsy, dementia or amyotrophic lateral sclerosis) or for treating many  
CC cancers, other proliferative diseases (restenosis and polycystic kidney  
CC disease), inflammatory and/or allergic diseases, viral infections  
CC (including HIV), autoimmune diseases and transplant rejection, and also  
CC for drug screening; diagnosis; target identification and validation;  
CC genetic engineering; pharmacogenomics; studying gene function and gene  
CC mapping (e.g. of single-nucleotide polymorphisms). The present sequence  
CC represents human v-rel reticuloendotheliosis viral oncogene homologue A  
CC (REL-A) siNA, which is used in the exemplification of the present  
CC invention. REL-A is a nuclear factor of the kappa light polypeptide gene  
CC enhancer in B-cells.  
XX  
SQ Sequence 19 BP; 3 A; 12 C; 3 G; 0 T; 1 U; 0 Other;



CC epilepsy, dementia or amyotrophic lateral sclerosis) or for treating many  
CC cancers, other proliferative diseases (restenosis and polycystic kidney  
CC disease), inflammatory and/or allergic diseases, viral infections  
CC (including HIV), autoimmune diseases and transplant rejection, and also  
CC for drug screening; diagnosis; target identification and validation;  
CC genetic engineering; pharmacogenomics; studying gene function and gene  
CC mapping (e.g. of single-nucleotide polymorphisms). The present sequence  
CC represents human v-rel reticuloendotheliosis viral oncogene homologue A  
CC (REL-A) sRNA, which is used in the exemplification of the present  
CC invention. REL-A is a nuclear factor of the kappa light polypeptide gene  
CC enhancer in B-cells.

SQ Sequence 19 BP; 1 A; 3 C; 12 G; 0 T; 3 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 19;  
Best Local Similarity 76.5%; Pred. No. 3.9e+03;  
Matches 13; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

QY 106 GCTTGGGGCTGGGGG 122  
||:||||| ||||  
Db 1 GCUUGGGGCGAGUGGG 17

RESULT 4589  
ADA45472  
ID ADA45472 standard; DNA; 19 BP.

XX ADA45472;  
AC  
XX 20-NOV-2003 (first entry)  
DT  
XX Human BAP1 DNA probe #16.  
DE

XX Functional allele profile; genetic inheritance; haplotype; population;  
KW disease; pharmacogenetic application; selective pressure; human; MSH2;  
KW MLH1; BRCA1; BRCA2; PTEN; BAP1; BARD1; p53; probe; ss.  
KW  
XX Homo sapiens.

OS  
XX US2003096236-A1.  
XX  
PN  
XX 22-MAY-2003.

XX 08-AUG-2001; 2001US-00923327.  
XX  
PF 12-FEB-1996; 96US-00598591.  
XX 12-FEB-1997; 97US-00798691.  
PR 04-AUG-1997; 97US-00905772.  
PR 22-MAY-1998; 98US-00084471.  
PR 04-AUG-1998; 98US-00129134.  
PR 14-MAR-2000; 2000US-00524794.

XX (ONCO-) ONCORMED INC.

XX Murphy PD;

XX WPI; 2003-576875/54.

XX Determining a functional allele profile of a gene in a population by  
PT identifying the nucleotide sequence of a gene of genomic DNA from each of  
PT the individuals with a family history of functional alleles of the gene  
PT of interest.

XX Example 5; Page 16; 28pp; English.

XX The present invention relates to a method for determining a functional  
CC allele profile of a gene in a population. The method comprises  
CC identifying the nucleotide sequence of a gene of interest out of genomic  
CC DNA from each of a population of individuals identified as having a  
CC family history which indicates inheritance of functional alleles of the  
CC gene of interest, and rank ordering the frequency of occurrence of each  
CC haplotype, where the identity of the alleles containing each haplotype  
CC and the determination of their relative frequencies constitutes the

CC functional allele profile of the gene of interest in the population. The  
CC method is useful for determining functional allele profiles which are  
CC useful in the treatment and diagnosis of diseases, for genetic and  
CC pharmacogenetic applications, and for evaluating the degree to which the  
CC gene(s) are under selective pressure. The present sequence represents a  
CC probe used in the method of the invention.

XX Sequence 19 BP; 6 A; 5 C; 3 G; 5 T; 0 U; 0 Other;  
SQ  
Query Match 0.5%; Score 13.8; DB 1; Length 19;  
Best Local Similarity 88.2%; Pred. No. 3.9e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2417 CTGTAAATACTGGTGCA 2433  
||||| |||||  
Db 3 CTGTAAATACTGGATCA 19

RESULT 4590  
ACD99555/C  
ID ACD99555 standard; DNA; 19 BP.

XX ACD99555;

XX 25-SEP-2003 (first entry)

XX Immunostimulatory nucleic acid #241.

XX Immunostimulatory; antiinflammatory; dermatological; antipsoriatic;  
KW antiulcer; gene therapy; vaccine; non-allergic inflammatory disease;  
KW psoriasis; eczema; allergic contact dermatitis; latex dermatitis;  
KW inflammatory bowel disease; ulcerative colitis; Crohn's disease; ss.

XX Synthetic.

XX US2003050268-A1.

XX 13-MAR-2003.

XX 29-MAR-2002; 2002US-00112653.

XX 29-MAR-2001; 2001US-0279642P.

XX (KRIE/) KRIEG A M.  
XX (BERG/) BERG D J.

XX Krieg AM, Berg DJ;

XX WPI; 2003-521815/49.

XX Treating non-allergic inflammatory diseases, such as psoriasis, eczema,  
PT allergic contact dermatitis, latex dermatitis or inflammatory bowel  
PT disease by administering an immunostimulatory nucleic acid.

XX Disclosure; Page 15; 229pp; English.

XX The invention describes a method of treating non-allergic inflammatory  
CC disease comprising administering to a subject having or at risk of  
CC developing a non-allergic inflammatory disease an immunostimulatory  
CC nucleic acid for prevention or treatment of the disease. The method is  
CC useful for treating non-allergic inflammatory diseases, such as  
CC psoriasis, eczema, allergic contact dermatitis, latex dermatitis or  
CC inflammatory bowel disease e.g., ulcerative colitis or Crohn's disease.  
CC This sequence represents an immunostimulatory nucleic acid

XX Sequence 19 BP; 0 A; 10 C; 9 G; 0 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 19;  
Best Local Similarity 88.2%; Pred. No. 3.9e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 520 CGGGCGCGCGCGGCC 536  
||| ||||| |||||

Db 19 CCGGGGGCCGGCCGGCC 3

RESULT 4591

ACD07875

ID ACD07875 standard; DNA; 19 BP.

XX AC ACD07875;

XX DT 08-AUG-2003 (first entry)

XX DE F. oxysporum trypsin promoter PCR primer multi 3.

XX KW PCR; ss; promoter; glucoamylase; Daria; Quinn; primer; trypsin;

XX KW heterologous gene expression; lipase.

XX OS Fusarium oxysporum.

XX PN US6518044-B1.

XX PD 11-FEB-2003.

XX PF 30-OCT-2001; 2001US-00999201.

XX PR 22-MAR-1999; 99US-00274449.

XX PR 22-JUL-1999; 99US-0145339P.

XX PR 22-MAR-2000; 2000US-00534407.

XX PA (NOVO ) NOVOZYMES BIOTECH INC.

XX PI Berka RM, Rey MW, Brown K, Brown SH;

XX WPI; 2003-455679/58.

PT Producing a polypeptide through the use of promoters that express genes

PT in fungal cell, comprises cultivating a fungal host cell in a medium for

PT the production of the polypeptide and isolating the polypeptide from the

PT cultivation medium.

XX Example 13; Col 30; 57pp; English.

PS The invention relates to producing a polypeptide comprises cultivating a

XX fungal host cell in a medium for the production of the polypeptide and

CC isolating the polypeptide from the cultivation medium. The host cell

CC comprises a first nucleic acid sequence encoding the polypeptide operably

CC linked to a second nucleic acid sequence having a promoter foreign to the

CC first sequence. The promoter comprises a nucleic acid sequence: (a)

CC having nucleotides 1-938 of the Fusarium venenatum Daria gene appearing

CC as ACD07859; or (b) that retains the promoter activity of nucleotides 1-

CC 938 of the Daria gene; or (c) that hybridises under medium stringency

CC conditions with nucleotides 1-938 of the Daria gene. Also disclosed are

CC the F. venenatum Daria protein (a novel secreted protein), the F.

CC venenatum Quinn gene/protein (a vacuolar associated protein) and the F.

CC venenatum glucoamylase gene/protein. The method is useful for producing a

CC polypeptide in commercially relevant quantities by using promoters that

CC express genes in fungal cells. The present sequence represents a PCR

CC primer used in the construction of an expression vector utilising the

CC Fusarium oxysporum trypsin promoter/terminator and the thermomyces

CC lanuginosus lipase gene as a reporter gene, for expression in Fusarium

XX venenatum

SQ Sequence 19 BP; 5 A; 4 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 19;

Best Local Similarity 88.2%; Pred. No. 3.9e+03;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 19 GTGTCCAGTGACCCGGA 35

Db 1 GTGTGCAGTGACCCAGA 17

RESULT 4592

ADD00126

ID ADD00126 standard; RNA; 19 BP.

XX AC ADD00126;

XX DT 01-JAN-2004 (first entry)

XX DE HCV coding region-derived 60% conserved RNA sequence 72.

XX KW HCV infection; replication; pathogenesis; virucide; vaccine;

XX KW gene therapy; ds.

XX OS Hepatitis C virus.

XX PN WO2003016572-A1.

XX PD 27-FEB-2003.

XX PF 16-AUG-2002; 2002WO-US021843.

XX PR 17-AUG-2001; 2001US-0313076P.

XX PR 20-DEC-2001; 2001US-0344116P.

XX PR 01-FEB-2002; 2002US-0353750P.

XX PA (ELIL ) LILLY & CO ELI.

XX PI Zhao G, Lu J, Glass JL, Martinez A, Yang Y;

XX WPI; 2003-268345/26.

PT New double stranded RNA oligonucleotide, useful for preparing a

PT composition for treating or preventing hepatitis C virus.

XX Disclosure; Page 49; 173pp; English.

XX The invention relates to a novel isolated double stranded RNA

CC oligonucleotide about 19 to about 25 ribonucleotides in length or its

CC equivalent. One strand of the oligonucleotide comprises the same

CC nucleotide sequence as a region of a hepatitis C virus (HCV) target RNA

CC polynucleotide sequence required for hepatitis C virus infection,

CC replication or pathogenesis in vitro or in vivo in a host cell. The

CC oligonucleotide of the invention demonstrates virucide activity and may

CC be useful for preparing a composition or vaccine for treating or

CC preventing hepatitis C virus, as well as during gene therapy procedures.

CC The current sequence is that of the HCV coding region-derived conserved

CC RNA sequence of the invention.

XX SQ Sequence 19 BP; 6 A; 11 C; 2 G; 0 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 19;

Best Local Similarity 88.2%; Pred. No. 3.9e+03;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 437 CACCAACCGCGCCAC 453

Db 3 CACCAACCGCGCCAC 19

RESULT 4593

ADD00278

ID ADD00278 standard; RNA; 19 BP.

XX AC ADD00278;

XX DT 01-JAN-2004 (first entry)

XX DE HCV coding region-derived 50% conserved RNA sequence 224.

XX KW HCV infection; replication; pathogenesis; virucide; vaccine;

XX KW gene therapy; ds.

XX OS Hepatitis C virus.

PN WO2003016572-A1.  
XX 27-FEB-2003.  
PD 16-AUG-2002; 2002WO-US021843.  
XX 17-AUG-2001; 2001US-0313076P.  
PR 20-DEC-2001; 2001US-0344116P.  
PR 01-FEB-2002; 2002US-0353750P.  
XX (ELIL ) LILLY & CO ELI.  
PA Zhao G, Lu J, Glass JI, Martinez A, Yang Y;  
XX WPI; 2003-268345/26.  
XX New double stranded RNA oligonucleotide, useful for preparing a  
PT composition for treating or preventing hepatitis C virus.  
XX Disclosure; Page 63; 173pp; English.  
XX The invention relates to a novel isolated double stranded RNA  
CC oligonucleotide about 19 to about 25 ribonucleotides in length or its  
CC equivalent. One strand of the oligonucleotide comprises the same  
CC nucleotide sequence as a region of a hepatitis C virus (HCV) target RNA  
CC polynucleotide sequence required for hepatitis C virus infection,  
CC replication or pathogenesis in vitro or in vivo in a host cell. The  
CC oligonucleotide of the invention demonstrates virucide activity and may  
CC be useful for preparing a composition or vaccine for treating or  
CC preventing hepatitis C virus, as well as during gene therapy procedures.  
CC The current sequence is that of the HCV coding region-derived conserved  
CC RNA sequence of the invention.  
XX Sequence 19 BP; 6 A; 11 C; 2 G; 0 T; 0 U; 0 Other;  
SQ Query Match 0.5%; Score 13.8; DB 1; Length 19;  
Best Local Similarity 88.2%; Pred. No. 3.9e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 437 CACCAGCGCGGCCAC 453  
DB 3 CACCACCGCGGCCAC 19  
RESULT 4594  
ADD19509  
ID ADD19509 standard; DNA; 19 BP.  
XX AC ADD19509;  
XX 15-JAN-2004 (first entry)  
XX Salmo salar SNP PCR primer SEQ ID NO:144.  
DE single nucleotide polymorphism; SNP; fish; Salmo salar;  
XX Oreochromis niloticus; Atlantic halibut; microsatellite; cod;  
KW polymorphic site; seabass; salmonidae; Tilapia; rainbow trout; halibut;  
KW detection; primer; ss.  
XX Synthetic.  
OS Salmo salar.  
XX WO2003060160-A2.  
PN 24-JUL-2003.  
PD 17-JAN-2003; 2003WO-IB000112.  
XX PF 18-JAN-2002; 2002US-0349950P.  
XX PR 16-AUG-2002; 2002US-0404200P.  
XX (GENO-) GENOMAR ASA.  
PA

PI Lie O, Slettan A, Hoyum M, Lingaas F;  
XX WPI; 2003-627388/59.  
DR Novel isolated nucleic acid molecule comprising single nucleotide  
XX polymorphism associated with fish, useful for forming PCR primers which  
PT are used for detecting single nucleotide polymorphisms in fish nucleic  
PT acids.  
XX Claim 5; SEQ ID NO 144; 233pp; English.  
PS The present invention describes an isolated nucleic acid (I) comprising a  
XX single nucleotide polymorphism (SNP) chosen from: (i) a nucleic acid of  
CC Salmo salar SNPs, Oreochromis niloticus SNPs or Atlantic halibut SNPs;  
CC and (ii) a nucleic acid having nucleotide sequence that hybridises to  
CC (i), or its complement under highly stringent hybridisation conditions.  
CC Also described: (1) an isolated oligonucleotide (II) comprising at least  
CC 17 contiguous nucleotides of a nucleotide sequence of S. salar SNPs, O.  
CC niloticus SNPs, O. niloticus microsatellites, Atlantic halibut SNPs; cod  
CC polymorphic sites and seabass polymorphic sites, or their complement; (2)  
CC a primer pair (III) suitable for use in PCR, comprising two (II) capable  
CC of amplifying a nucleotide sequence chosen from S. salar SNPs and, O.  
CC niloticus SNPs, O. niloticus microsatellites, Atlantic halibut SNPs, cod  
CC polymorphic sites and seabass polymorphic sites; and determining (M1) the  
CC origin of fish sample comprising providing a parent genotype database  
CC comprising a collection of candidate parent genotypes, where each of the  
CC candidate parent genotype represents a distinct origin, and comparing a  
CC sample genotype to the parent genotype database, where a match between  
CC the sample genotype and one of the candidate parent genotype identifies  
CC to the origin of the sample. (M1) is useful for determining the origin of  
CC a fish sample such as family salmonidae, S. salar, Tilapia, O. niloticus,  
CC rainbow trout, halibut, seabass and Atlantic cod. (II) is useful for  
CC detecting nucleic acid molecule comprising SNP in a sample, which  
CC involves contacting the sample containing nucleic acids with one or more  
CC (II) derived from nucleotide sequence of S. salar SNPs and O. niloticus  
CC SNPs, and identifying nucleic acid that hybridises to (II). (II) is  
CC useful for detecting nucleic acid molecule comprising a polymorphic  
CC sequence in a sample, comprising contacting the sample containing nucleic  
CC acids with one or more (II) which is derived from O. niloticus  
CC microsatellite, O. niloticus SNPs, Atlantic halibut SNPs, cod polymorphic  
CC sites or seabass polymorphic sites, and identifying a nucleic acid that  
CC hybridises to (II). (III) is useful for detecting nucleic acid molecule  
CC comprising a microsatellite sequence in sample. The present sequence is  
CC used in the exemplification of the present invention.  
XX Sequence 19 BP; 5 A; 6 C; 5 G; 3 T; 0 U; 0 Other;  
SQ Query Match 0.5%; Score 13.8; DB 1; Length 19;  
Best Local Similarity 88.2%; Pred. No. 3.9e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 269 GCCGGGCGAGCAGCTCTA 285  
DB 2 GCCAGGCGAGCAGCTCTA 18  
RESULT 4595  
ADE65619  
ID ADE65619 standard; RNA; 19 BP.  
XX AC ADE65619;  
XX 29-JAN-2004 (first entry)  
XX Human c-fos transcript target sequence/siNA upper strand, SEQ ID NO:74.  
DE RNA interference; short interfering nucleic acid; siNA;  
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
KW drug screening; diagnosis; therapeutic target identification;  
KW pharmacogenomics; gene function analysis; gene mapping;  
KW central nervous system disorder; Alzheimer's disease;  
KW Parkinson's disease; Huntington's disease; epilepsy; dementia;



KW amyotrophic lateral sclerosis; cancer; proliferative disease; restenosis;  
KW polycystic kidney disease; inflammatory disease; allergic disease;  
KW viral infection; HIV infection; autoimmune disease; transplant rejection;  
KW vasotropic; neutropic; antiparkinsonian; neuroprotective; cytostatic;  
KW antiinflammatory; antiallergic; virucide; anti-HIV; immunosuppressive;  
KW anticonvulsant; nephrotropic; human; c-fos; target sequence; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO2003070914-A2.  
XX  
PD 28-AUG-2003.  
XX  
PF 20-FEB-2003; 2003WO-US005162.  
XX  
XX 20-FEB-2002; 2002US-0358580P.  
PR 11-MAR-2002; 2002US-0363124P.  
PR 06-JUN-2002; 2002US-0386782P.  
PR 29-AUG-2002; 2002US-0406784P.  
PR 05-SEP-2002; 2002US-0408378P.  
PR 09-SEP-2002; 2002US-0409293P.  
PR 15-JAN-2003; 2003US-0440129P.  
XX  
PA (SIRN-) SIRNA THERAPEUTICS INC.  
XX  
XX Mcswiggen J, Beigelman L;  
PI WPI; 2003-679877/64.  
DR  
XX  
PT New short interfering nucleic acid downregulates expression of the c-fos  
PT gene useful for treatment and diagnosis of diseases, e.g. cancer and  
PT inflammation.  
XX  
PS Example 3; SEQ ID NO 74; 145pp; English.  
XX

CC The invention relates to short interfering nucleic acids (siNA) which  
CC downregulate expression of the human c-fos gene by RNA interference. The  
CC siNAs may or may not comprise ribonucleotides and may be double or single  
CC stranded. They further comprise sense and antisense regions, or  
CC alternatively are assembled from a sense oligonucleotide and an antisense  
CC oligonucleotide. Specifically, the siNAs include short interfering RNA  
CC (siRNA), double-stranded RNA, micro-RNA (miRNA) and short hairpin RNA  
CC (shRNA). The siNAs can be unmodified or chemically modified, can contain  
CC deoxyribonucleotides, and can be chemically synthesised, expressed from a  
CC vector or enzymatically synthesised. The invention also relates to kits  
CC for the in vitro or in vivo delivery of siNA; conjugates and/or complexes  
CC of siNA; and vectors that express siNA. The siNAs are used to modulate  
CC expression of the c-fos gene in cells, tissue explants or organisms  
CC (e.g., by ex vivo gene therapy), or in grafts and transplants for the  
CC treatment of a variety of conditions. They may be used for treating  
CC central nervous system lesions and injuries (e.g., Alzheimer's disease,  
CC Parkinson's disease, Huntington's disease, epilepsy, dementia or  
CC amyotrophic lateral sclerosis); various cancers; other proliferative  
CC diseases (e.g., restenosis and polycystic kidney disease); inflammatory  
CC and/or allergic diseases; viral infections (including HIV infection);  
CC autoimmune diseases; and transplant rejection. The siNAs are also useful  
CC for drug screening, diagnosis, therapeutic target identification and  
CC validation, genetic engineering, pharmacogenomics, studying gene  
CC function, and gene mapping (e.g., of single nucleotide polymorphisms).  
CC The present sequence represents the upper strand of a human c-fos-  
CC targeted double-stranded siNA, which is identical to the c-fos transcript  
CC target sequence.  
XX

SQ Sequence 19 BP; 5 A; 8 C; 5 G; 0 T; 1 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 19;  
Best Local Similarity 88.2%; Pred. No. 3.9e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 440 CAGCCGGCGCCACAGG 456  
|||  
Db 2 CAGCCGGCGCCACAGG 18

RESULT 4596  
ADE65735/c  
ID ADE65735 standard; RNA; 19 BP.  
XX  
AC ADE65735;  
XX  
DT 29-JAN-2004 (first entry)  
XX  
DE Human c-fos siNA lower strand, SEQ ID NO:190.  
XX

KW RNA interference; short interfering nucleic acid; siNA;  
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
KW drug screening; diagnosis; therapeutic target identification;  
KW pharmacogenomics; gene function analysis; gene mapping;  
KW central nervous system disorder; Alzheimer's disease;  
KW parkinson's disease; Huntington's disease; epilepsy; dementia;  
KW amyotrophic lateral sclerosis; cancer; proliferative disease; restenosis;  
KW polycystic kidney disease; inflammatory disease; allergic disease;  
KW viral infection; HIV infection; autoimmune disease; transplant rejection;  
KW vasotropic; neutropic; antiparkinsonian; neuroprotective; cytostatic;  
KW antiinflammatory; antiallergic; virucide; anti-HIV; immunosuppressive;  
KW anticonvulsant; nephrotropic; human; c-fos; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO2003070914-A2.  
XX  
PD 28-AUG-2003.  
XX  
PF 20-FEB-2003; 2003WO-US005162.  
XX  
XX 20-FEB-2002; 2002US-0358580P.  
PR 11-MAR-2002; 2002US-0363124P.  
PR 06-JUN-2002; 2002US-0386782P.  
PR 29-AUG-2002; 2002US-0406784P.  
PR 05-SEP-2002; 2002US-0408378P.  
PR 09-SEP-2002; 2002US-0409293P.  
PR 15-JAN-2003; 2003US-0440129P.  
XX  
PA (SIRN-) SIRNA THERAPEUTICS INC.  
XX  
XX Mcswiggen J, Beigelman L;  
PI WPI; 2003-679877/64.  
DR  
XX  
PT New short interfering nucleic acid downregulates expression of the c-fos  
PT gene useful for treatment and diagnosis of diseases, e.g. cancer and  
PT inflammation.  
XX  
PS Example 3; SEQ ID NO 190; 145pp; English.  
XX

CC The invention relates to short interfering nucleic acids (siNA) which  
CC downregulate expression of the human c-fos gene by RNA interference. The  
CC siNAs may or may not comprise ribonucleotides and may be double or single  
CC stranded. They further comprise sense and antisense regions, or  
CC alternatively are assembled from a sense oligonucleotide and an antisense  
CC oligonucleotide. Specifically, the siNAs include short interfering RNA  
CC (siRNA), double-stranded RNA, micro-RNA (miRNA) and short hairpin RNA  
CC (shRNA). The siNAs can be unmodified or chemically modified, can contain  
CC deoxyribonucleotides, and can be chemically synthesised, expressed from a  
CC vector or enzymatically synthesised. The invention also relates to kits  
CC for the in vitro or in vivo delivery of siNA; conjugates and/or complexes  
CC of siNA; and vectors that express siNA. The siNAs are used to modulate  
CC expression of the c-fos gene in cells, tissue explants or organisms  
CC (e.g., by ex vivo gene therapy), or in grafts and transplants for the  
CC treatment of a variety of conditions. They may be used for treating  
CC central nervous system lesions and injuries (e.g., Alzheimer's disease,  
CC Parkinson's disease, Huntington's disease, epilepsy, dementia or  
CC amyotrophic lateral sclerosis); various cancers; other proliferative  
CC diseases (e.g., restenosis and polycystic kidney disease); inflammatory  
CC and/or allergic diseases; viral infections (including HIV infection);



CC autoimmune diseases; and transplant rejection. The siNAs are also useful  
CC for drug screening, diagnosis, therapeutic target identification and  
CC validation, genetic engineering, pharmacogenomics, studying gene  
CC function, and gene mapping (e.g., of single nucleotide polymorphisms).  
CC The present sequence represents the lower strand of a human c-fos-  
CC targeted double-stranded siNA.  
XX  
SQ Sequence 19 BP; 1 A; 5 C; 8 G; 0 T; 5 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 19;  
Best Local Similarity 88.2%; Pred. No. 3.9e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 440 CAGCCGGCGCCACAGG 456  
|||||||  
Db 18 CAGCCGGCACCCACAAG 2  
  
RESULT 4597  
ADE36637/c  
ID ADE36637 standard; DNA; 19 BP.  
XX  
AC ADE36637;  
XX  
DT 29-JAN-2004 (first entry)  
XX  
DE Human ERG gene PCR primer.  
XX  
KW foetal aneuploidy; foetal allele; detection; foetal DNA; prenatal;  
KW chromosome aberration; chromosome mutation; PCR primer; human; ERG gene;  
KW chromosome 21; ss.  
XX  
OS Synthetic.  
OS Homo sapiens.  
XX  
PN WO2003062441-A1.  
XX  
PD 31-JUL-2003.  
XX  
PF 17-JAN-2003; 2003WO-US001551.  
XX  
PR 18-JAN-2002; 2002US-0349877P.  
XX  
PA (GENZ ) GENZYME CORP.  
XX  
PI Landes GM, Michalowsky L, Miller G, Weber W;  
XX  
DR WPI; 2003-902657/82.  
XX  
PT Detecting fetal aneuploidies or alleles of a gene of interest in fetal  
PT DNA by determining the ratio of methylated and unmethylated DNA in  
PT maternal serum is useful for prenatal detection of chromosome aberrations  
PT and mutations.  
XX  
PS Example 4; Page 17; 31pp; English.  
XX  
CC The present invention describes methods for detecting foetal  
CC aneuploidies, alleles of a gene of interest in foetal DNA and imprinted  
CC genes in a subject. Also described: (1) detecting foetal aneuploidies  
CC comprising treating DNA from maternal serum with a reagent that  
CC differentially modifies methylated and non-methylated DNA and performing  
CC quantitative PCR using one primer pair on a potentially aneuploid  
CC chromosome and a on a non-aneuploid chromosome with an different primer  
CC pair and comparing the ratio of the quantity of the two PCR products; (2)  
CC detecting alleles of a gene of interest in foetal DNA, comprising  
CC treating DNA isolated from maternal serum with bisulfite, performing PCR  
CC with a primer pair that amplifies the gene of interest and analysing the  
CC PCR product to identify the allele of the gene of interest; (3) detecting  
CC imprinted genes in a subject comprises treating DNA isolated from the  
CC subject with bisulfite, performing PCR with a primer pair for a  
CC polymorphic region that only amplifies bisulfite-treated unmethylated DNA  
CC and analysing the PCR product to identify the polymorphism thereby  
CC detecting imprinted genes. The invention is used for prenatal detection

CC of chromosome aberrations and mutations. The present sequence represents  
CC a PCR primer for the human ERG gene, which is used in an example from the  
CC present invention. The human ERG gene is located on chromosome 21 within  
CC the Down's critical region.  
XX  
SQ Sequence 19 BP; 3 A; 10 C; 0 G; 6 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 19;  
Best Local Similarity 88.2%; Pred. No. 3.9e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 1535 AGGTTAGGAGAGTAGGG 1551  
|||||||  
Db 17 AGGTTAGGAGAGCAAGG 1  
  
RESULT 4598  
ADE43577  
ID ADE43577 standard; DNA; 19 BP.  
XX  
AC ADE43577;  
XX  
DT 29-JAN-2004 (first entry)  
XX  
DE Human IDE sequencing primer, SEQ ID 182.  
XX  
KW Neurodegenerative disease; uPA; SNCG; IDE; KNSL1; LIPA; TNFRSF6;  
KW Alzheimer's disease; neuroprotective; nootropic; gene therapy;  
KW Chromosome 10; PCR; primer; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO2003054143-A2.  
XX  
PD 03-JUL-2003.  
XX  
PF 25-OCT-2002; 2002WO-US034679.  
XX  
PR 25-OCT-2001; 2001US-0339525P.  
PR 08-NOV-2001; 2001US-0336929P.  
PR 08-NOV-2001; 2001US-0338010P.  
PR 09-NOV-2001; 2001US-0338363P.  
PR 04-DEC-2001; 2001US-0337052P.  
PR 28-MAR-2002; 2002US-0368919P.  
XX  
PA (NEUR-) NEUROGENETICS INC.  
PA (GEO ) GEN HOSPITAL CORP.  
XX  
PI Becker KD, Velicelebi G, Elliott KJ, Wang X, Tanzi RE, Bertram L;  
PI Saunders AJ, Mullin KM, Sampson AJ, Blacker DL;  
XX  
DR WPI; 2003-559131/52.  
XX  
PT Determining a predisposition for or the occurrence of neurodegenerative  
PT disease, e.g. Alzheimer's disease by detecting in a target nucleic acid  
PT the presence or absence of an allelic variant of one or more polymorphic  
PT regions.  
XX  
PS Example 3; Page 277; 848pp; English.  
XX  
CC The present invention relates to a method (M1) for determining a  
CC predisposition for or the occurrence of neurodegenerative disease in a  
CC subject. The method comprises detecting in a target nucleic acid obtained  
CC from the subject the presence or absence of an allelic variant of one or  
CC more polymorphic regions of one or more genes selected from uPA  
CC (Urokinase plasminogen activator), SNCG (gamma-synuclein), IDE (insulin-  
CC degrading enzyme), KNSL1 (Kinesin-like protein 1), LIPA (lysosomal acid  
CC lyase), and TNFRSF6 (Tumour Necrosis Factor Receptor-SF6), where the  
CC presence of at least one of the allelic variant of one or more  
CC polymorphic regions is indicative of a predisposition for or the  
CC occurrence of neurodegenerative disease. The genes are all located on  
CC chromosome 10. M1 is useful for determining a predisposition for or the  
CC occurrence of, and for treating neurodegenerative disease, particularly

CC Alzheimer's disease. The present sequence is a PCR primer, which was used  
CC in the method of the invention.

XX Sequence 19 BP; 9 A; 3 C; 6 G; 1 T; 0 U; 0 Other;  
SQ

Query Match 0.5%; Score 13.8; DB 1; Length 19;  
Best Local Similarity 88.2%; Pred. No. 3.9e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1529 GAAGAAAGGTTAGGAGA 1545

Db 3 GAAGAAAGGTCAGCAGA 19

RESULT 4599

ADE29797

ID ADE29797 standard; RNA; 19 BP.

AC ADE29797;

DT 29-JAN-2004 (first entry)

DE Mitogen activated protein kinase siNA oligonucleotide SEQ ID NO:419.

XX short interfering nucleic acid; siNA; downregulation; inhibition;  
KW mitogen-activated protein kinase; MAP kinase; MAPK; RNA interference;  
KW cytosstatic; anorectic; antidiabetic; antiinflammatory; antiasthmatic;  
KW immunosuppressive; antibacterial; antirheumatic; antiarthritic;  
KW antipsoriatic; gastrointestinal; obesity; diabetes; tumour;  
KW inflammatory disease; asthma; septic shock; rheumatoid arthritis;  
KW psoriasis; inflammatory bowel disease; drug screening;  
KW genetic engineering; pharmacogenomic; gene mapping; ss.

XX Synthetic.

XX WO2003072590-A1.

XX 04-SEP-2003.

XX 28-JAN-2003; 2003WO-US002510.

XX 20-FEB-2002; 2002US-0358580P.

PR 11-MAR-2002; 2002US-0363124P.

PR 06-JUN-2002; 2002US-0386782P.

PR 29-AUG-2002; 2002US-0406784P.

PR 05-SEP-2002; 2002US-0408378P.

PR 09-SEP-2002; 2002US-0409293P.

PR 15-JAN-2003; 2003US-0440129P.

XX (SIRN-) SIRNA THERAPEUTICS INC.

XX Mcswiggen J, Beigelman L, Usman N, Haeberli P, Chowrira B;

XX WPI; 2003-689980/65.

XX New short interfering nucleic acid, useful e.g. for treatment and  
PT diagnosis of cancer, downregulates expression of mitogen-activated  
PT protein kinase genes.

XX Example 3; SEQ ID NO 419; 164pp; English.

XX The present invention describes a short interfering nucleic acid (siNA)  
CC that downregulates expression of a mitogen-activated protein kinase  
CC (MAPK) genes by RNA interference. Also described: (1) a method for  
CC modulating expression of MAPK genes in cells, tissue explants or  
CC organisms by introduction of siNA; (2) kits for in vitro or in vivo  
CC delivery of siNA; (3) conjugates and/or complexes of siNA; and (4)  
CC vectors that express siNA and cells containing these vectors. MAPK siNAs  
CC have cytostatic, anorectic, antidiabetic, antiinflammatory,  
CC antiasthmatic, immunosuppressive, antibacterial, antirheumatic,  
CC antiarthritic, antipsoriatic and gastrointestinal activities. The MAPK  
CC siNAs can be used to modulate the expression of MAPK genes, in cells,  
CC tissue explants or organisms, e.g. for treating obesity; diabetes types I

CC and II; a wide range of tumours, and inflammatory diseases (asthma,  
CC septic shock, rheumatoid arthritis, psoriasis and inflammatory bowel  
CC disease). They can also be used for drug screening; diagnosis; target  
CC identification and validation; genetic engineering; pharmacogenomics;  
CC studying gene function and gene mapping (e.g. of single-nucleotide  
CC polymorphisms). The present sequence represents a MAPK siNA which is used  
CC in the exemplification of the present invention.

SQ Sequence 19 BP; 3 A; 10 C; 1 G; 0 T; 5 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 19;

Best Local Similarity 64.7%; Pred. No. 3.9e+03;

Matches 11; Conservative 4; Mismatches 2; Indels 0; Gaps 0;

OY 333 CGCCACCCTACTTTCCC 349

Db 2 CCCACCCUAGUUUCCC 18

RESULT 4600

ADE29902/c

ID ADE29902 standard; RNA; 19 BP.

XX ADE29902;

XX 29-JAN-2004 (first entry)

DE Mitogen activated protein kinase siNA oligonucleotide SEQ ID NO:524.  
XX short interfering nucleic acid; siNA; downregulation; inhibition;  
KW mitogen-activated protein kinase; MAP kinase; MAPK; RNA interference;  
KW cytosstatic; anorectic; antidiabetic; antiinflammatory; antiasthmatic;  
KW immunosuppressive; antibacterial; antirheumatic; antiarthritic;  
KW antipsoriatic; gastrointestinal; obesity; diabetes; tumour;  
KW inflammatory disease; asthma; septic shock; rheumatoid arthritis;  
KW psoriasis; inflammatory bowel disease; drug screening;  
KW genetic engineering; pharmacogenomic; gene mapping; ss.

XX Synthetic.

XX WO2003072590-A1.

XX 04-SEP-2003.

XX 28-JAN-2003; 2003WO-US002510.

XX 20-FEB-2002; 2002US-0358580P.

PR 11-MAR-2002; 2002US-0363124P.

PR 06-JUN-2002; 2002US-0386782P.

PR 29-AUG-2002; 2002US-0406784P.

PR 05-SEP-2002; 2002US-0408378P.

PR 09-SEP-2002; 2002US-0409293P.

PR 15-JAN-2003; 2003US-0440129P.

XX (SIRN-) SIRNA THERAPEUTICS INC.

XX Mcswiggen J, Beigelman L, Usman N, Haeberli P, Chowrira B;

XX WPI; 2003-689980/65.

XX New short interfering nucleic acid, useful e.g. for treatment and  
PT diagnosis of cancer, downregulates expression of mitogen-activated  
PT protein kinase genes.

XX Example 3; SEQ ID NO 524; 164pp; English.

XX The present invention describes a short interfering nucleic acid (siNA)  
CC that downregulates expression of a mitogen-activated protein kinase  
CC (MAPK) genes by RNA interference. Also described: (1) a method for  
CC modulating expression of MAPK genes in cells, tissue explants or  
CC organisms by introduction of siNA; (2) kits for in vitro or in vivo  
CC delivery of siNA; (3) conjugates and/or complexes of siNA; and (4)  
CC vectors that express siNA and cells containing these vectors. MAPK siNAs

CC have cytostatic, anorectic, antidiabetic, antiinflammatory,  
CC antiasthmatic, immunosuppressive, antibacterial, antirheumatic,  
CC antiarthritic, antipsoriatic and gastrointestinal activities. The MAPK  
CC siNAs can be used to modulate the expression of MAPK genes, in cells,  
CC tissue explants or organisms, e.g. for treating obesity; diabetes types I  
CC and II; a wide range of tumours, and inflammatory diseases (asthma,  
CC septic shock, rheumatoid arthritis, psoriasis and inflammatory bowel  
CC disease). They can also be used for drug screening; diagnosis; target  
CC identification and validation; genetic engineering; pharmacogenomics;  
CC studying gene function and gene mapping (e.g. of single-nucleotide  
CC polymorphisms). The present sequence represents a MAPK siNA which is used  
CC in the exemplification of the present invention.

XX Sequence 19 BP; 5 A; 1 C; 10 G; 0 T; 3 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 19;  
Best Local Similarity 88.2%; Pred. No. 3.9e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 333 CGCCACCCTACTTCCC 349  
Db 18 CCCACCCTAGTTCCC 2

RESULT 4601  
AAA94537/c  
ID AAA94537 standard; DNA; 20 BP.

XX AAA94537;

XX 09-JAN-2001 (first entry)

XX Antisense oligonucleotide #20977 targeted to human G-alpha-S1.

DE G-alpha-S1; infection; inflammation; tumour; antisense; human;  
KW phosphorothioate; 2'-methoxyethyl; MOE; 5-methylcytidine;  
KW Gs-alpha-short form; ss.

XX Homo sapiens.

XX Key Location/Qualifiers

FT modified\_base 1..20

FT /\*tag= a

FT /mod\_base= OTHER

FT /note= "Optionally the internucleotide linkages are

FT phosphorothioate"

FT modified\_base 1..5

FT /\*tag= b

FT /mod\_base= OTHER

FT /note= "Optionally the nucleotides are 2'-methoxyethyl  
FT and cytidine residues are 5-methylcytidines"

FT modified\_base 16..20

FT /\*tag= c

FT /mod\_base= OTHER

FT /note= "Optionally the nucleotides are 2'-methoxyethyl  
FT and cytidine residues are 5-methylcytidines"

XX US6110664-A.

XX 29-AUG-2000.

XX 25-JUN-1999; 99US-00344914.

XX 25-JUN-1999; 99US-00344914.

XX (ISIS-) ISIS PHARM INC.

XX Cowser LM;

XX WPI; 2000-586346/55.

XX New antisense compounds for modulating the expression of G-alpha-S1,  
PT especially useful for diagnostics, therapeutics and prophylaxis, e.g. to

PT prevent or delay infection, inflammation or tumor formation.  
XX Claim 3; Col 40; 37pp; English.

XX The present invention relates to antisense compounds 8-30 bases long  
CC targeted to a coding region, a stop codon, or a 3' untranslated region of  
CC human G-alpha-S1 (see AAA94451). The antisense compounds specifically  
CC hybridize with and inhibit the expression of human G-alpha-S1. The  
CC antisense compounds are useful for diagnostics, therapeutics and  
CC prophylaxis, e.g. to prevent or delay infection, inflammation or tumour  
CC formation. Particularly, the antisense oligonucleotides are useful for  
CC treating humans prone to a disease or condition associated with  
CC expression of G-alpha-S1. The present sequence an antisense  
CC oligonucleotide targeted to the 3' untranslated region of human G-alpha-  
CC S1

XX Sequence 20 BP; 4 A; 2 C; 1 G; 13 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1504 GAAACACAGGAATATAA 1520  
Db 20 GAAACAAATGAAATATAA 4

RESULT 4602

ABZ89720

ID ABZ89720 standard; DNA; 20 BP.

XX ABZ89720;

XX 17-OCT-2003 (first entry)

XX Human oligonucleotide sequence.

KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.

XX WO200285308-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

XX Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.

XX Disclosure; SEQ ID NO 4962; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or





QY 1974 CCTTGAAAAAAGAAAA 1990  
| | | | | | | | | | | | | | | |  
Db 17 CCTTAAAAAAGAAAAA 1

RESULT 4605  
ADA45244/c  
ID ADA45244 standard; DNA; 20 BP.  
XX  
AC ADA45244;  
XX  
DT 20-NOV-2003 (first entry)  
XX  
DE Human MSH2 gene PCR primer #3.  
XX  
KW Functional allele profile; genetic inheritance; haplotype; population;  
disease; pharmacogenetic application; selective pressure; human; MSH2;  
KW MLH1; BRCA1; BRCA2; PTEN; BAP1; BARD1; p53; PCR; primer; ss.  
XX  
OS Homo sapiens.  
XX  
PN US2003096236-A1.  
XX  
PD 22-MAY-2003.  
XX  
PF 08-AUG-2001; 2001US-00923327.  
XX  
PR 12-FEB-1996; 96US-00598591.  
PR 12-FEB-1997; 97US-00798691.  
PR 04-AUG-1997; 97US-00905772.  
PR 22-MAY-1998; 98US-00084471.  
PR 04-AUG-1998; 98US-00129134.  
PR 14-MAR-2000; 2000US-00524794.  
XX  
PA (ONCO-) ONCORMED INC.  
XX  
PI Murphy PD;  
XX  
DR WPI; 2003-576875/54.  
XX  
PT Determining a functional allele profile of a gene in a population by  
identifying the nucleotide sequence of a gene of genomic DNA from each of  
the individuals with a family history of functional alleles of the gene  
of interest.  
XX  
PS Example 1; Page 9; 28pp; English.  
XX  
CC The present invention relates to a method for determining a functional  
allele profile of a gene in a population. The method comprises  
identifying the nucleotide sequence of a gene of interest out of genomic  
DNA from each of a population of individuals identified as having a  
family history which indicates inheritance of functional alleles of the  
gene of interest, and rank ordering the frequency of occurrence of each  
haplotype, where the identity of the alleles containing each haplotype  
and the determination of their relative frequencies constitutes the  
functional allele profile of the gene of interest in the population. The  
method is useful for determining functional allele profiles which are  
useful in the treatment and diagnosis of diseases, for genetic and  
pharmacogenetic applications, and for evaluating the degree to which the  
gene(s) are under selective pressure. The present sequence represents a  
PCR primer used in the method of the invention.  
XX  
SQ Sequence 20 BP; 3 A; 1 C; 3 G; 13 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1974 CCTTGAAAAAAGAAAA 1990  
| | | | | | | | | | | | | | | |  
Db 17 CCTTAAAAAAGAAAAA 1

RESULT 4606  
AAQ20027  
ID AAQ20027 standard; DNA; 20 BP.  
XX  
AC AAQ20027;  
XX  
DT 01-APR-1992 (first entry)  
XX  
DE Cross-linking oligomer 112 for targetting HUM11B.  
XX  
KW deoxyribonucleic acid; major groove; ethanoamino group; IL-1;  
KW aziridinylcytosine; cross-linking group; o-xyloso linking group;  
human interleukin-1 beta; inverted polarity region; ss.  
XX  
OS Synthetic.  
XX  
FH Key Location/Qualifiers  
FT modified\_base 1 /\*tag= a  
FT /\*mod\_base= OTHER  
FT /\*note= "N4N4-ethanocytosine"  
FT modified\_base 4  
FT /\*tag= b  
FT /\*mod\_base= m5c  
FT misc\_feature 14..20  
FT /\*tag= c  
FT /\*label= inverted\_polarity\_region  
FT /\*note= "see comments"  
FT modified\_base 14  
FT /\*tag= d  
FT /\*mod\_base= m5c  
FT modified\_base 18  
FT /\*tag= e  
FT /\*mod\_base= m5c  
FT modified\_base 19  
FT /\*tag= f  
FT /\*mod\_base= OTHER  
FT /\*note= "N-methyl-8-oxo-2'-deoxyadenine"  
XX  
PN WO9118997-A.  
XX  
PD 12-DEC-1991.  
XX  
PF 25-MAY-1990; 90US-00529346.  
XX  
PR 25-MAY-1990; 90US-00529346.  
PR 14-JAN-1991; 91US-00640654.  
XX  
PA (GILE-) GILEAD SCIE INC.  
XX  
PI Matteucci MD, Krawczyk S;  
XX  
DR WPI; 1992-007480/01.  
XX  
PT New sequence-specific non-photo-activated crosslinking agents - bind to  
the major groove of duplex DNA and are esp. useful for treating latent  
PT infections e.g. HIV.  
XX  
PS Example 4; Page 25; 42pp; English.  
XX  
CC This oligomer contains an inverted polarity region formed from an o-  
xyloso dimer synthon. Residues 13 and 14 are linked via an o-xyloso group  
CC (i.e. nucleotides that have xylose sugar linked via the o-xyloso ring).  
CC The sequence is designed to target the Human interleukin-1 beta gene  
CC beginning at nucleotide 7378 and will covalently cross-link to it via the  
CC N4N4-ethanocytosine group. See also AAQ20026-Q20030  
XX  
SQ Sequence 20 BP; 1 A; 4 C; 0 G; 15 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2162 CTCCTTTTTCCTTTTTCCTTTT 2178  
Db 1 CTCCTTTTTCCTTTTTCCTTT 17

RESULT 4607  
AAQ30372  
ID AAQ30372 standard; DNA; 20 BP.  
XX AAQ30372;  
AC  
XX 25-MAR-2003 (revised)  
DT 07-DEC-1992 (first entry)  
XX  
DE Oligomer HUM beta 112 for forming triplex with IL-1 target duplex.  
XX  
KW Human interleukin - 1 beta gene; herpes simplex; AIDS; modified; HIV;  
KW RSV; HPV; malignancy; hepatitis; inflammation; ss.  
XX  
OS Synthetic.  
XX

FH Key Location/Qualifiers  
FT modified\_base 1 /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "OTHER= N4 N4 ethanocytosine"  
FT modified\_base 4 /\*tag= b  
FT /mod\_base= m5c  
FT misc\_feature 13. .14  
FT /\*tag= g  
FT /note= "o-xyloso dimer synthon linkage"  
FT misc\_feature 14. .20  
FT /\*tag= f  
FT /label= inverted\_polarity\_region  
FT /note= "see comments"  
FT modified\_base 14  
FT /\*tag= c  
FT /mod\_base= m5c  
FT modified\_base 18  
FT /\*tag= d  
FT /mod\_base= m5c  
FT modified\_base 19  
FT /\*tag= e  
FT /mod\_base= OTHER  
FT /note= "OTHER= N6 methyl-8-oxo 2' deoxyadenine"  
XX

PN WO9209705-A1.  
XX  
PD 11-JUN-1992.  
XX  
PF 25-NOV-1991; 91WO-US008811.  
XX  
PR 23-NOV-1990; 90US-00617907.  
PR 18-JAN-1991; 91US-00643382.  
PR 08-APR-1991; 91US-00683420.  
PR 17-APR-1991; 91US-00686544.  
PR 17-APR-1991; 91US-00686546.  
PR 17-APR-1991; 91US-00686547.  
PR 27-SEP-1991; 91US-00766733.  
XX  
PA (GILEB-) GILEAD SCI INC.  
XX

PI Froehler B, Krawczyk S, Matteucci MD, Milligan J;  
XX  
DR WPI; 1992-217083/26.  
XX  
XX New oligomers contg. modified bases - which form a triplex with G-C  
PT doublet in a DNA duplex, for treating and diagnosing HIV, hepatitis,  
PT herpes malignancy and inflammation.  
XX  
PS Claim 12; Page 70; 77pp; English.

XX The synthetic oligomer is capable of forming a triplex at physiological  
CC pH with a purine rich target sequence by coupling into the major groove  
CC of the duplex. The specific target sequence of this oligomer is the human  
CC interleukin -1 beta gene beginning at nucleotide 7378 contg. a purine  
CC rich sequence concd. on one strand of the duplex. The oligomer, and  
CC others like it are useful in diagnosis and therapy of diseases  
CC characterised by specific DNA duplex targets, e.g. HPV; HER; HIV,  
CC hepatitis B, herpes, malignant tumours and inflammation. The triple  
CC helices form under mild conditions thus assays may be carried out without  
CC subjecting the test specimen to harsh conditions. The oligomer contains  
CC an inverted polarity region formed from an o-xyloso dimer synthon. The  
CC linking gp. is o-xyloso (nucleotides have the 3' positions of xylose  
CC sugars linked via the o-xylene ring). Two nucleotides are coupled through  
CC a xylene residue to form the dimer synthon. This additional modifications  
CC may render the oligomer stable to nuclease activity. The oligomer is able  
CC to inhibit gene expression, as verified by in vitro systems. See also  
CC AAQ25452-25501 and AAQ30226-448. (Updated on 25-MAR-2003 to correct PN  
CC field.)  
XX  
SQ Sequence 20 BP; 1 A; 4 C; 0 G; 15 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2162 CTCCTTTTTCCTTTTTCCTTTT 2178  
Db 1 CTCCTTTTTCCTTTTTCCTTT 17

RESULT 4608  
AAQ94534  
ID AAA94534 standard; DNA; 20 BP.  
XX  
AC AAA94534;  
XX  
DT 09-JAN-2001 (first entry)  
XX  
DE Antisense oligonucleotide #20974 targeted to human G-alpha-S1.  
XX  
KW G-alpha-S1; infection; inflammation; tumour; antisense; human;  
KW phosphorothioate; 2'-methoxyethyl; MOE; 5-methylcytidine;  
KW Gs-alpha short form; ss.  
XX  
OS Homo sapiens.  
XX

FH Key Location/Qualifiers  
FT modified\_base 1. .20  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "Optionally the internucleotide linkages are  
FT phosphorothioate"  
FT modified\_base 1. .5  
FT /\*tag= b  
FT /mod\_base= OTHER  
FT /note= "Optionally the nucleotides are 2'-methoxyethyl  
FT and cytidine residues are 5-methylcytidines"  
FT modified\_base 16. .20  
FT /\*tag= c  
FT /mod\_base= OTHER  
FT /note= "Optionally the nucleotides are 2'-methoxyethyl  
FT and cytidine residues are 5-methylcytidines"  
XX

PN US6110664-A.  
XX  
XX 29-AUG-2000.  
PD  
XX 25-JUN-1999; 99US-00344914.  
PF  
XX 25-JUN-1999; 99US-00344914.  
PR  
XX (ISIS-) ISIS PHARM INC.  
PA





CC isolated atlastin polypeptide; (2) identifying subjects who have, or are  
CC at risk of developing, hereditary spastic paraplegia (HSP); (3) a kit for  
CC determining if a subject has, or at risk of developing, HSP; (4) a  
CC computer readable medium encoding a representation of the atlastin  
CC nucleic acid sequence or polypeptide; (6) identifying subjects at risk of  
CC carrying an allele for HSP; and (7) treating a patient with HSP. Atlastin  
CC has neuroprotective activity and can be used in gene therapy. The  
CC atlastin nucleic acid is useful for preparing a composition for treating  
CC HSP or for identifying subjects who have, or at risk of developing, HSP.  
CC The present sequence represents an atlastin intronic splice site  
CC oligonucleotide, which is given in an example from the present invention  
XX

SQ Sequence 20 BP; 2 A; 2 C; 1 G; 15 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2786 AAAAAAAAAAAAAA 2802  
||| ||||| ||||| |||||  
Db 18 AAAAAAAAAAGAAAAAGA 2

RESULT 4611  
AAAS5978/c  
ID AAAS5978 standard; DNA; 20 BP.

XX

AC AAAS5978;

DT 05-SEP-2000 (first entry)

DE Human G713 PCR primer SEQ ID NO:17.

XX Human; chromosome 13; G713; chromosome 13q31-q33; schizophrenia;  
KW biallelic marker; polymorphism; central nervous disease; detection;  
KW neuroleptic; G713 gene expression inhibitor; genotyping; PCR primer;  
KW brain disorder; psychiatric disorder; bipolar disorder; ss.

XX Homo sapiens.

PN WO200022122-A2.

PD 20-APR-2000.

PF 12-OCT-1999; 99WO-IB001730.

PR 13-OCT-1998; 98US-0103955P.

PR 30-OCT-1998; 98US-0106457P.

XX (GEST ) GENSET.

PI Blumenfeld M, Bougueleret L, Chumakov I, Cohen D, Essioux L;

XX WPI; 2000-317979/27.

PT Novel polynucleotide of human G713 gene useful for diagnosis and  
PT prophylactic treatment of brain, psychiatric disorders like schizophrenia  
PT and bipolar disorders.

PS Disclosure; Page 26; 271pp; English.

XX The present invention describes an isolated, purified or recombinant  
CC polynucleotide (PN) (I) comprising a contiguous span of 8 to 50  
CC nucleotides, where the span includes a G713 or chromosome 13q31-q33  
CC related biallelic marker. (I) has neuroleptic activity and can be used as  
CC a G713 gene expression inhibitor. (I) can be used genotyping to estimate  
CC the frequency of an allele of a G713 or chromosome 13q31-q33 related  
CC biallelic marker in a population, and of a haplotype for a set of  
CC biallelic markers in a population. (I) is also useful in detecting an  
CC association between a haplotype and a trait. The frequency is used for  
CC detecting an association between a genotype and a trait being  
CC schizophrenia. The genotype is used to determine whether an individual is  
CC at risk of developing schizophrenia. (I) can also be used as a medicament

CC against several disorders preferably brain, psychiatric disorders such as  
CC schizophrenia and bipolar disorder. Early identification of risk of  
CC developing schizophrenia is possible, which would enable early and/or  
CC prophylactic treatment. AAAS5964 to AAAS5966 represent human G713 genomic  
CC DNA sequences; AAAS5967 encodes the human G713 protein AAY90962; AAAS5968  
CC encodes the murine G713 protein AAY90963; AAAS5992 to AAAS6030 represent  
CC human chromosome 13q31-q33 locus biallelic markers A12 to A49; AAAS5969  
CC to AAAS5991, and AAAS6031 and AAAS6032 represent PCR primers used in the  
CC exemplification of the present invention

SQ Sequence 20 BP; 3 A; 1 C; 3 G; 13 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2784 TGAAAAAAAAAAAAA 2800  
||| ||||| ||||| |||||  
Db 17 TGTCAAAAAAAAAAAAA 1

RESULT 4612  
ABZ89489  
ID ABZ89489 standard; DNA; 20 BP.

XX

AC ABZ89489;

DT 17-OCT-2003 (first entry)

DE Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.

PN WO200285308-A2.

PD 31-OCT-2002.

PF 23-APR-2002; 2002WO-US013135.

PR 24-APR-2001; 2001US-0286137P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-229219/22.

PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.

PS Disclosure; SEQ ID NO 4731; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also

CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 16 A; 2 C; 0 G; 2 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2786 AAAAAAAAAAAAAAAAAA 2802  
Db 1 ACATAAAAAAAAAAAAAAAA 17

RESULT 4613  
AAQ43126  
ID AAQ43126 standard; DNA; 20 BP.

XX AC AAQ43126;  
XX 25-MAR-2003 (revised)  
DT 23-SEP-1993 (first entry)

XX HCV type 2 NS-4 sense primer 281.

XX Non-coding region; hepatitis C virus; blood donor; type 2; type 1; HCV;  
KW NS-5; phylogeny; differentiation; NS-3; core region; type 3; PCR;  
KW amplify; polymerase chain reaction; primer; NS4; ss.

XX Synthetic.

XX WO9310239-A2.

XX 27-MAY-1993.

XX 20-NOV-1992; 92WO-GB002143.

XX 21-NOV-1991; 91GB-00024696.

XX 24-JUN-1992; 92GB-00013362.

XX (COMM-) COMMON SERVICES AGENCY.

XX Simmonds P, Chan S, Yap PL;

XX WPI; 1993-182554/22.

XX DNA encoding antigenic peptide(s) of new types of hepatitis C virus - for  
PT diagnosing and treating HCV infection, screening blood samples and  
PT identifying different HCV types.

XX Disclosure; Page 27; 120pp; English.

XX The sequences given in AAQ43112-33 are primers which were used to amplify  
CC specific regions of the hepatitis C virus (HCV) genome. Analysis of  
CC regions of the HCV genome revealed the existence of three distinct groups  
CC of HCV. Analysis of the region encompassing -255 to -62 of the 5' non  
CC coding region (NCR) (see AAQ43058-75) showed a difference of 9-14% in the  
CC nucleotide sequences between the three groups. Two of the groups  
CC identified were similar to those of HCV variants termed type 1 and 2,  
CC whilst the third appeared to represent a novel type of virus. Comparison  
CC of the NS3 region (see AAR37927-30) showed a high degree of sequence  
CC diversity with type 3 being phylo- genetically different to type 1 and 2.  
CC The same degree of differentiation was noted in the NS-5 (see AAR37923-  
CC 26), core region (see AAR37931) and the NS4 region (see AAQ43106-111)  
CC between type 3 and type 1 sequences. (Updated on 25-MAR-2003 to correct  
CC PN field.)

XX  
SQ Sequence 20 BP; 2 A; 10 C; 3 G; 5 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 250 GGTCCTCCACCTCTCCT 266  
Db 1 GGTCCTCCACCTCTCCT 17

RESULT 4614  
AAQ41528/c  
ID AAQ41528 standard; DNA; 20 BP.

XX AC AAQ41528;

XX 25-MAR-2003 (revised)

DT 10-AUG-1993 (first entry)

XX Antisense oligomer targetting EBER-2 internal sequence.

XX Epstein Barr virus; EBV; hybridisation; antisense modulator; replication;  
KW nasopharyngeal carcinoma; Burkitt lymphoma; Sjogren's; syndrome;  
KW infectious mononucleosis; latent; active; infection; ss.

XX Synthetic.

XX WO9307882-A1.

XX 29-APR-1993.

XX 23-OCT-1992; 92WO-US008989.

XX 25-OCT-1991; 91US-00783605.

XX (ISIS-) ISIS PHARM INC.

XX Anderson KP, Ecker DJ;

XX WPI; 1993-152174/18.

XX Oligo:nucleotide(s) hybridising with RNA of Epstein Barr virus - for  
PT treating active, latent and chronic EBV infections and associated  
PT diseases e.g. nasopharyngeal carcinoma, Burkitt's lymphoma.

XX Claim 1; Page 20; 45pp; English.

XX The synthetic peptide is an antisense modulator of Epstein Barr virus and  
CC pref. contains at least one phosphorothioate linking gp. and  
CC modifications in the 2' position. These modifications improve penetration  
CC into regions of the cell that contain nucleic acid and also resistance to  
CC degradation by nucleases. The oligonucleotide targets an EBER-2 internal  
CC sequence and hybridises, thus inhibiting replication of EBV. The oligomer  
CC may be used for treating or preventing EBV-associated diseases, e.g.  
CC nasopharyngeal carcinoma, Burkitt's lymphoma, Sjogren's syndrome,  
CC infectious mononucleosis etc. The oligomer is effective against both  
CC latent and active EBV infection. See also AAQ40575-9 and AAQ41517-44.  
CC (Updated on 25-MAR-2003 to correct PN field.)

XX Sequence 20 BP; 5 A; 5 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2068 AGTGGTATCTGACACAC 2084  
Db 18 AGTGGTTTCGGACACAC 2

RESULT 4615



AAQ47650/c  
ID AAQ47650 standard; cDNA to mRNA; 20 BP.  
XX AC  
XX AAQ47650;  
DT 25-MAR-2003 (revised)  
DT 26-JAN-1994 (first entry)  
XX  
DE Mouse jun-B MUSJUNBA/C-2219 human-rodent common c-jun probe.  
XX  
KW quantification; GTP binding protein; G protein; diagnosis; alpha subunit;  
KW specific mRNA; detection; hybridisation; pathophysiology; disease state;  
KW hereditary; cancer; infectious; osteodystrophy; pituitary tumour;  
KW acromegaly; melanoma cells; diabetes; PCR; polymerase chain reaction;  
KW specific; ss.  
XX OS  
OS Synthetic.  
XX WO9315221-A1.  
XX  
XX PD  
XX 05-AUG-1993.  
XX  
XX PF 29-JAN-1993; 93WO-US000977.  
XX  
PR 29-JAN-1992; 92US-00827208.  
PR 24-MAR-1992; 92US-00857059.  
PR 12-NOV-1992; 92US-00974409.  
XX  
XX (HITB ) HITACHI CHEM CO LTD.  
PA (HITB ) HITACHI CHEM RES CENT INC.  
XX  
XX PI Akitaya T, Cooper A, Mitsuhashi M;  
XX  
XX DR WPI; 1993-258695/32.  
XX  
PT Quantitating messenger RNA in sample - using immobilised-polynucleotide  
PT having sequence complementary to sequence unique to the mRNA.  
XX  
PS Example 9; Page 76; 177pp; English.  
XX  
CC The sequences given in AAQ47650-53 show regions of homology between jun  
CC sequences and the human-rodent common c-jun specific probe C-2219 which  
CC may be of use as c-jun specific probes. They were used in the method of  
CC the invention for the detection and quantification of mRNAs in a sample  
CC without the need to purify the mRNA from cells. The claimed method  
CC comprises identifying a polynucleotide sequence unique to the mRNA, and  
CC immobilising an oligomer complementary to this sequence to an insoluble  
CC support. The sample is then incubated with the insoluble support such  
CC that the unique sequence will hybridise to the bound oligomer and be  
CC immobilised. Non-immobilised components are washed from the support and  
CC bound RNA is labelled in such a way that the label is incorporated onto  
CC the support relative to the amount of mRNA on the support. The amount of  
CC bound label is then determined. This method can be used for the reliable,  
CC rapid, simultaneous quantification of multiple varieties of mRNA. It may  
CC be used for diagnosing and recognition of pathophysiology of various  
CC disease states, eg. hereditary diseases, cancer, and infectious diseases.  
CC G proteins are thought to be involved in causing various disease states.  
CC A genetic deficiency of Gs protein is the molecular basis of hereditary  
CC osteodystrophy. Pituitary tumours in acromegalic patients have been shown  
CC to contain mutant Gs proteins. G proteins are also involved in invasive  
CC and metastatic melanoma cells, and diabetes. See also AAQ47381-666.  
CC (Updated on 25-MAR-2003 to correct PN field.)  
XX  
SQ Sequence 20 BP; 2 A; 5 C; 8 G; 5 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 353 CCCTACCAGCAGCTGGC 369  
Db 17 CCCTAGCAGCACTGGC 1

RESULT 4616  
AAQ56662/c  
ID AAQ56662 standard; DNA; 20 BP.  
XX AC  
XX AAQ56662;  
DT 25-MAR-2003 (revised)  
DT 16-AUG-1994 (first entry)  
XX  
DE Bacteriophage lambda gt11 forward F1 primer.  
XX  
KW Human megakaryocyte differentiation factor; MDF; thrombopoietin;  
KW haematopoietic stimulating factor; thrombocytopaenia; platelet;  
KW bone marrow transplantation; cancer chemotherapy; bacteriophage lambda;  
KW polymerase chain reaction; primer; ss.  
XX OS  
OS Synthetic.  
XX PN EP583884-A1.  
XX  
XX PD 23-FEB-1994.  
XX  
XX PF 19-JUL-1993; 93EP-00305654.  
XX  
PR 17-JUL-1992; 92JP-00212305.  
PR 04-MAR-1993; 93JP-00067339.  
XX  
XX (SUNR ) SUNTORY LTD.  
XX  
XX PI Tsujimoto M, Iwasa F, Tsuruoka N, Nakazato H, Miura K, Ishida N;  
XX PI Kurihara T, Yamaichi K, Yamaguchi N;  
XX  
XX DR WPI; 1994-058782/08.  
XX  
PT New megakaryocyte differentiation factor - isolated from human epidermoid  
PT carcinoma cells, used to treat conditions involving a decrease in  
PT platelets.  
XX  
PS Example 2; Page 28; 47pp; English.  
XX  
CC The cDNA coding for human megakaryocyte differentiation factor (MDF) was  
CC isolated from a library prepared using mRNA derived from human epidermoid  
CC carcinoma A431 cells. The oligonucleotides AAQ56647- AAQ56667 were used  
CC in the isolation and sequence analysis of MDF cDNA by PCR. Identification  
CC and isolation of the 5' portion of MDF cDNA involved amplification of a  
CC HPC-x11 phage library using the lambda gt11-forward F1 primer (AAQ56662).  
CC (Updated on 25-MAR-2003 to correct PN field.)  
XX  
SQ Sequence 20 BP; 6 A; 6 C; 4 G; 4 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 803 CTGGTGGGGCGCGTAAT 819  
Db 18 CTGGTGTGGGCCATAAT 2  
RESULT 4617  
AAQ64082  
ID AAQ64082 standard; cDNA; 20 BP.  
XX AC  
XX AAQ64082;  
DT 14-FEB-1995 (first entry)  
XX  
DE NANBHV NS1/NS2 (EN3) primer kk49.  
XX  
KW Non-A, non-B hepatitis virus; NANBHV; hepatitis C virus; HCV; core; ENV;  
KW NS1; NS2; NS3; antigen; detection; amplification; primer;  
KW polymerase chain reaction; PCR; ss.



XX OS Synthetic.  
XX PN JP06141870-A.  
XX PD 24-MAY-1994.  
XX PF 12-MAR-1992; 92JP-00088140.  
XX PR 12-MAR-1992; 92JP-00088140.  
XX PA (TOKR-) ZH TOKYO RINSHO IGAKU SOGO KENKYUSHO.  
XX PA (SANW) SANWA KAGAKU KENKYUSHO CO.  
XX PA (TOFU) TONEN CORP.  
XX DR WPI; 1994-205028/25.  
XX PT DNA coding a Non-A-Non-B hepatitis virus antigen - useful for detecting  
XX PT HCV within serum.  
XX PS Disclosure; Page 7; 22pp; Japanese.  
XX CC Hepatitis C virus #4 and #6 genes were isolated (AAQ64068-69). Both genes  
XX CC contain the core, ENV, NS1, NS2 and NS3 regions. A core region fragment  
XX CC is given in AAQ64067  
XX SQ Sequence 20 BP; 4 A; 12 C; 1 G; 3 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
OY 774 ACCCTCTGAACCTCCCC 790  
Db 1 ACCACCTGAACCTCCCC 17  
RESULT 4618  
AAQ45269/c  
ID AAQ45269 standard; DNA; 20 BP.  
XX AC AAQ45269;  
XX DT 25-MAR-2003 (revised)  
XX DT 28-OCT-1994 (first entry)  
XX DE Primer to amplify sequence tagged site for human chromosome 15.  
XX KW Yeast Artificial Chromosome; YAC; polymerase chain reaction; PCR;  
XX KW sequence tagged site; genetic disorder; diagnosis; abnormality;  
XX KW Prader-Willi; Angelman; Beckwith-Wiedemann; syndrome; ss.  
XX OS Synthetic.  
XX PN WO9406936-A1.  
XX PD 31-MAR-1994.  
XX PF 10-SEP-1993; 93WO-US008501.  
XX PR 11-SEP-1992; 92US-00943639.  
XX PA (BAYU) BAYLOR COLLEGE MEDICINE.  
XX PI Airhart SD, Mutirangura A, Ledbetter DH;  
XX DR WPI; 1994-118484/14.  
XX PT Diagnosis of genetic disorders associated with chromosomal abnormalities  
XX PT and uniparental disomy, e.g. Prader-Willi; Angelman syndrome - using in  
XX PT situ hybridisation using probes spanning the IR4-3R or GABRB3 regions.  
XX PS Example 5; Page 34; 91pp; English.

XX CC Primers AAQ45269 and AAQ45270 amplify a 100bp sequence tagged site (STS)  
XX CC from a yeast artificial chromosome, useful as a probe to diagnose Prader-  
XX CC Willi/Angelman Syndrome. (Updated on 25-MAR-2003 to correct PN field.)  
XX SQ Sequence 20 BP; 9 A; 4 C; 2 G; 5 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
OY 2004 TTCTTCAGAGATCAAGT 2020  
Db 20 TTCTTCAGAGTTAAAGT 4  
RESULT 4619  
AAQ98982  
ID AAQ98982 standard; cDNA; 20 BP.  
XX AC AAQ98982;  
XX DT 27-FEB-1996 (first entry)  
XX DE H1 extra exon reverse transcriptase primer #1.  
XX KW Polymerase chain reaction; PCR; primer; amplify; RT-PCR;  
XX KW anti-Mullerian hormone; AMH; receptor; antibody; therapy; H1; 2B10;  
XX KW tumour; Mullerian inhibiting substance; MIS; ss.  
XX OS Synthetic.  
XX PN WO9516709-A2.  
XX PD 22-JUN-1995.  
XX PF 13-DEC-1994; 94WO-US014643.  
XX PR 13-DEC-1993; 93US-00166333.  
XX PR 23-DEC-1993; 93US-00173512.  
XX PA (BIOJ) BIOGEN INC.  
XX PA (INRM) INSERM INST NAT SANTE & RECH MED.  
XX PI Cate RL, Josso N;  
XX DR WPI; 1995-231521/30.  
XX PT New DNA encoding anti-Mullerian hormone receptor, related polypeptide(s)  
XX PT and antibodies - useful in immunoassays screening for ligands, treatment  
XX PT of cancer cells expressing the receptor etc.  
XX PS Example; Page 30; 77pp; English.  
XX CC The sequences shown in AAQ98984-5 are reverse-transcriptase primers.  
XX CC These two primers amplify regions of the anti-Mullerian hormone (AMH)  
XX CC receptor isoforms 2B10 and H1. The difference between these two isoforms  
XX CC is that H1 contains an extra exon. This means that a 347 bp band is  
XX CC amplified for H1, whereas a 164 bp band is amplified for 2B10. AMH is a  
XX CC glycoprotein and is part of the transforming growth factor-beta  
XX CC superfamily. AMH receptors are present in a limited number of tissues and  
XX CC can therefore be used to design antibody-toxin complexes to target tumour  
XX CC cells in these tissues. The RT-PCR reaction was carried out on total RNA  
XX CC isolated from the AMH target tissues of the rabbit reproductive tract.  
XX CC These tissues were the mesenchyme surrounding the mullerian duct, and the  
XX CC granulosa cells of ovarian follicles, and the seminiferous tubules in the  
XX CC testis. H1 and 2B10 were found in these tissues with a slight prevalence  
XX CC of H1. The AMH-receptor sequences can be used to screen and purify  
XX CC compounds that bind to them. The antibody designed from the receptor  
XX CC sequences can be used in immunoassays to detect the levels of AMH-  
XX CC receptor. The antibody can also be linked to a toxin in order to kill  
XX CC cells that express the receptor, e.g. cancer cells

SQ Sequence 20 BP; 3 A; 5 C; 8 G; 4 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2555 AGGATGCTGGGCTCTGT 2571  
Db 3 AGGATGCTGGGCACTCT 19

RESULT 4620  
AAT41105/C  
ID AAT41105 standard; DNA; 20 BP.  
XX AC AAT41105;  
XX DT 03-DEC-1996 (first entry)  
XX DE Human gene signature HUMGS01145-derived sense primer.  
XX KW Gene signature; messenger RNA; mRNA; relative abundance; frequency;  
KW human; cloning; mapping; non-biased library; diagnosis; detection;  
KW cell typing; abnormal cell function; primer; PCR; amplification;  
KW polymerase chain reaction; ss.  
XX OS Synthetic.  
XX PN WO9514772-A1.  
XX PD 01-JUN-1995.  
XX PF 11-NOV-1994; 94WO-JP001916.  
XX PR 12-NOV-1993; 93JP-00355504.  
XX PA (MATS/) MATSUBARA K.  
XX PA (OKUB/) OKUBO K.  
XX PI Matsubara K, Okubo K;  
XX DR WPI; 1995-206931/27.  
XX PT Single-stranded DNA for identifying gene signatures - isolated from 3'-  
PT directed human cDNA library that reflects relative abundance of corresp.  
PT mRNA in specific human tissues.  
XX PS Example 7; Fig 7; 2245pp; Japanese.  
XX CC Primers T41001-T41382 are derived from novel human gene signature (GS)  
CC sequences which did not match with sequences deposited in Genbank release  
CC 76. The GS sequences (T19001-T26837) were obtained from 3'-directed cDNA  
CC libraries prepared from various human tissues; synthesis of cDNA was  
CC initiated from the 3'-end of mRNA by using poly(T) as the sole primer.  
CC Each library is constructed so as to reflect accurately the relative  
CC abundance of different mRNAs in the particular tissue from which it was  
CC derived. The appearance frequency of a given GS in a cDNA library can be  
CC determined (esp. using primers and probes derived from the GS sequences)  
CC as a means of diagnosing abnormal cell function or for recognising  
CC different cell types. The primers T41105-6 amplify clone pm0281 which  
CC comprises the GS HUMGS001145 (T20145), located on chromosome 7  
XX SQ Sequence 20 BP; 5 A; 6 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 84 TGACCCCGATTGGAT 100  
Db 17 TGACCCCGAGTTGGCT 1

RESULT 4621  
AAQ86599  
ID AAQ86599 standard; DNA; 20 BP.  
XX AC AAQ86599;  
XX DT 25-MAR-2003 (revised)  
DT 28-SEP-1995 (first entry)  
XX DE HEV ORF2.0 PCR 5' primer.  
XX KW Hepatitis E virus; HEV; ORF2; antigen; vaccine; immunogen; primer; PCR;  
KW polymerase chain reaction; ss.  
XX OS Synthetic.  
XX PN WO9508632-A1.  
XX PD 30-MAR-1995.  
XX PF 23-SEP-1994; 94WO-AU000572.  
XX PR 24-SEP-1993; 93AU-00001423.  
PR 15-DEC-1993; 93AU-00002964.  
XX PA (MACF-) MACFARLANE BURNET CENT MEDICAL.  
XX PI Anderson DA, Locarnini SA, Torresi J, Li F, Hui Z;  
XX DR WPI; 1995-139601/18.  
XX PT Antigens of hepatitis E virus (HEV) - selectively immuno-reactive to  
PT convalescent and/or acute phase circulating antibodies to HEV.  
XX PS Example 1; Page 21; 78pp; English.  
XX CC The primers given in AAQ86594-86603 were used in the RT-PCR amplification  
CC of ORF2 and part of ORF3 of a Chinese isolate of HEV. Amplified fragments  
CC were manipulated into pGEX vectors for production of GST-HEV antigen  
CC fusion proteins in E. coli. (Updated on 25-MAR-2003 to correct PN field.)  
XX SQ Sequence 20 BP; 5 A; 5 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2239 CTTAAGGCTGAAGCT 2255  
Db 2 CTTAAGGCTGAAGCT 18

RESULT 4622  
AAQ86829  
ID AAQ86829 standard; DNA; 20 BP.  
XX AC AAQ86829;  
XX DT 13-DEC-1995 (first entry)  
XX DE Antisense oligonucleotide ISIS 7595 hybridises to MRP gene.  
XX KW Untranslated region; coding sequence; chemotherapeutic drug treatment;  
KW antisense; modulation; multidrug resistance protein; drug; cancer; ss.  
XX OS Synthetic.  
XX PH Key Location/Qualifiers  
FT misc\_feature 1..20  
FT /\*tag= a  
FT /note= "contains phosphorothioate internucleotide  
FT linkages"  
XX

PN WO9510938-A1.  
XX 27-APR-1995.  
PD 23-SEP-1994; 94WO-US010827.  
XX 18-OCT-1993; 93US-00136811.  
XX (ISIS-) ISIS PHARM INC.  
XX Baracchini E, Bennett CF;  
PI WPI; 1995-169974/22.  
DR New oligo:nucleotide cpds., esp. for cancer therapy - which are  
XX specifically hybridisable with nucleic acid encoding multi:drug  
PT resistance-associated protein.  
PT Claim 7; Page 10; 36pp; English.  
PS  
XX Oligonucleotides AAQ86826-50 are antisense oligonucleotides used to  
CC modulate the expression of the multidrug resistance protein (MRP) by  
CC hybridising with the multidrug resistance (MDR) gene or its RNA message.  
CC This sequence is targeted to the 5' untranslated region (5'UTR) of the  
CC MDR gene. The oligonucleotides can be used to improve the efficacy of  
CC chemotherapeutic drug treatment of a disease such as cancer or to prevent  
CC multidrug resistance developing during drug treatment of a disease  
XX  
SQ Sequence 20 BP; 0 A; 7 C; 12 G; 1 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 51 GCGGCGGGGCGGCGGC 67  
| | | | | | | | | | | | | | | | | | | | | |  
Db 4 GTGGCGCGGCGGCGGC 20  
  
RESULT 4623  
AAT39924/C  
ID AAT39924 standard; cDNA; 20 BP.  
XX  
AC AAT39924;  
XX  
DT 23-JAN-1997 (first entry)  
XX  
DE Maize acetyl CoA carboxylase 3' PCR primer 28sst-110F.  
XX  
KW Acetyl CoA carboxylase; ACCase; herbicide tolerance; cyclohexanedione;  
KW aryloxyphenoxypionic acid; vegetable oil; oilseed; maize; corn;  
KW polymerase chain reaction; PCR; primer; Zea mays; ss.  
XX  
OS Synthetic.  
XX  
PN WO9631609-A2.  
XX  
PD 10-OCT-1996.  
XX  
PF 04-APR-1996; 96WO-US004625.  
XX  
PR 05-APR-1995; 95US-00417089.  
XX  
PA (MINU ) UNIV MINNESOTA.  
XX  
PI Gengenbach BG, Somers DA, Wyse DL, Gronwald JW, Egli MA, Lutz SM;  
XX WPI; 1996-465030/46.  
DR  
XX  
PT DNA encoding maize acetyl coenzyme A carboxylase gene - used for prodn.  
PT of plants with herbicide tolerance or altered oil content.  
XX  
PS Example 7; Page 60; 131pp; English.

XX PCR primers 28sst-110F (AAT39924) and 28sst-2T3+ (AAT39925) cover a  
CC sequence coding for a conserved amino acid sequence found in all acetyl  
CC CoA carboxylases (ACCcase). They are used as 3' primers with PCR primers  
CC specific for the 5' untranslated region of ACCase Type A1 genomic clones  
CC (see also AAT39906-07). ACCase Type A2 genomic clones (see also AAT39908-  
CC 13) are weakly amplified by these primer combinations, and A2 amplified  
CC products differ in sequence from A1 amplified products. Sequence  
CC differences in the 5' region should provide a means of distinguishing  
CC between expression of A1 and A2 ACCase genes  
XX  
SQ Sequence 20 BP; 4 A; 3 C; 7 G; 6 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 1573 CCTTCTCCACGCGACAG 1589  
| | | | | | | | | | | | | | | | | | | | | |  
Db 18 CCTTCTCAACGCGACAG 2  
  
RESULT 4624  
AAT44306/C  
ID AAT44306 standard; DNA; 20 BP.  
XX  
AC AAT44306;  
XX  
DT 03-APR-1997 (first entry)  
XX  
DE Primer 5 for amplifying Lg-FLO1 coding sequence.  
XX  
KW Lg-FLO1; brewers yeast; flocculability; brewing; alcoholic drink; beer;  
KW wine; brandy; sake; shochu; whiskey; fuel alcohol; soy sauce; miso;  
KW flocculin; ss.  
XX  
OS Synthetic.  
XX  
PN WO9623877-A1.  
XX  
PD 08-AUG-1996.  
XX  
PF 31-JAN-1996; 96WO-JP000183.  
XX  
PR 01-FEB-1995; 95JP-00015449.  
PR 02-MAY-1995; 95JP-00108688.  
XX  
PA (KIRI ) KIRIN BEER KK.  
XX  
PI Kobayashi O, Hayashi N, Sone H;  
XX WPI; 1996-371427/37.  
DR  
XX DNA encoding Protein Lg-FLO1 which imparts brewer's yeast type  
PT flocculability to yeasts - useful in brewing of alcoholic drinks.  
XX  
PS Example 1; Page 16; 51pp; English.  
XX  
CC The sequences given in AAT44306-16 are primers which were used to amplify  
CC the Lg-FLO1 coding sequence. Lg-FLO1 imparts a brewers yeast type  
CC flocculability to yeasts. Yeasts that are transformed with Lg-FLO1 have  
CC enhanced or new flocculability. Conversely, introduction of the DNA in a  
CC disabled form, or suppression of its expression, converts the yeast to a  
CC strain in which flocculability has been reduced or eliminated. Production  
CC of yeasts with controlled flocculability properties are useful in the  
CC brewing of alcoholic drinks such as beer, wine, brandy, sake, shochu or  
CC whiskey, or for the production of fuel alcohol and for the production of  
CC other fermentation products such as soy sauce or miso  
XX  
SQ Sequence 20 BP; 7 A; 5 C; 3 G; 5 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 160 GGACGCCATGTTGTGGA 176  
| | | | | | | | | | | | | | |  
Db 19 GGACACCATGTTGTGTA 3

RESULT 4625  
AAV06314/c  
ID AAV06314 standard; DNA; 20 BP.  
XX  
AC AAV06314;  
XX  
DT 06-MAY-1998 (first entry)  
XX  
DE Mouse gut RNA amplifying RT-PCR primer MR-6.  
XX  
KW Collagen; gut; recombinant; post-translational enzyme; mouse;  
KW procollagen; RT-PCR primer; ss.  
XX  
OS Synthetic.  
OS Mus sp.  
XX  
PN WO9738710-A1.  
XX  
PD 23-OCT-1997.  
XX  
PF 11-APR-1997; 97WO-US007300.  
XX  
PR 12-APR-1996; 96US-00631336.  
XX  
PA (FIBR-) FIBROGEN INC.  
PA (FIFI-) ACAD FINLAND.  
XX  
PI Kivirikki KI, Pihlajaniemi T;  
XX  
DR WPI; 1997-526203/48.  
XX  
PT Recombinant production of (pro)collagen having correct folding - using  
PT vectors encoding collagen sub:unit and collagen post-translational enzyme  
PT respectively.  
XX  
PS Example 10; Page 53; 90pp; English.  
XX  
CC This primer is used in the RT-PCR amplification with the mouse gut RNA as  
CC a template. This is used to generate a probe G2 for murine type XIII  
CC collagen. This is used in a novel method for producing a (pro)collagen  
CC polypeptide. The (pro)collagen polypeptide is selected from collagen  
CC types IV, V, VI, VII, VIII, IX, X, XI, XII, XIII, XIV, XV, XVI, XVII,  
CC XVIII, and XIX. The method comprises culturing a host cell, where the  
CC host cell has been infected, transfected or transformed with a first  
CC expression vector comprising a polynucleotide molecule having a nucleic  
CC acid sequence which encodes a (pro)collagen subunit and a second  
CC expression vector comprising a polynucleotide molecule having a nucleic  
CC acid sequence which encodes at least one (pro)collagen post-translational  
CC enzyme or enzyme subunit. The (pro)collagen polypeptide is then purified  
CC from the cultured cell. The methods can be used for the production of  
CC collagens such as human collagens which can be used in therapeutic  
CC applications. The method provides for the synthesis of correctly folded  
CC proteins so that they exhibit the normal triple-helical conformation  
CC characteristic of procollagens and collagens. Purification of the  
CC collagens is greatly facilitated  
SQ Sequence 20 BP; 1 A; 7 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1287 GGACACGACGGCTCGCC 1303  
| | | | | | | | | | | | | | |  
Db 19 GGACACGACGGCTCACC 3

RESULT 4626  
AAT88934/c  
ID AAT88934 standard; DNA; 20 BP.  
XX  
AC AAT88934;  
XX  
DT 22-JAN-1998 (first entry)  
XX  
DE Detector probe 1 for the gag gene of HIV.  
XX  
KW HIV; gag; HLA-DQ-alpha; human acute myelogenous leukaemia; AML; PCR;  
KW primer; thermophilic strand displacement amplification; tSDA;  
KW in situ amplification; probe; screening; ss.  
XX  
OS Synthetic.  
OS Human immunodeficiency virus.  
XX  
PN WO97111196-A2.  
XX  
PD 27-MAR-1997.  
XX  
PF 12-SEP-1996; 96WO-US014648.  
XX  
PR 21-SEP-1995; 95US-00531747.  
PR 21-SEP-1995; 95US-00531749.  
XX  
PA (BECT ) BECTON DICKINSON CO.  
XX  
PI Lohman KL, Ostrerova NV, Van Cleve M, Reid RA;  
XX  
DR WPI; 1997-202902/18.  
XX  
PT Detection of nucleic acids in cells - by in situ amplification of target  
PT sequences by thermophilic strand displacement amplification.  
XX  
PS Claim 14; Page 16; 37pp; English.  
XX  
CC This 32P labelled primer is an example of a detector probe for the  
CC amplified products of the gag gene of HIV. It is used in a modified  
CC version of thermophilic strand displacement amplification (tSDA) to  
CC amplify double stranded DNA in situ. Amplification primers (see AAT88932-  
CC 3) are hybridised to both strands of the gene, and are extended. Both  
CC primers have a restriction endonuclease (RE) recognition site, and the  
CC products will also contain these sites. The products are displaced from  
CC the target sequence, by extension of the bumper primers (see AAT88941-  
CC 42), which anneal upstream of the amplification primers, and made double  
CC stranded by synthesising complementary strands. Making the products  
CC double stranded causes "nicks" to be created (via the RE recognition  
CC sites). Further extension occurs from the nicks, thereby displacing a  
CC copy of the target sequence from the double stranded amplification primer  
CC extension products. The nicking, extending and displacing steps are  
CC repeated, and the target sequence amplified in situ. The method can be  
CC used for the amplification of DNA in situ in cells in suspension, on  
CC slides or in tissues, with speed, sensitivity and specificity. In situ  
CC tSDA also remains compatible with immunochemical techniques in spite of  
CC the increased reaction temperature so both amplification of DNA and  
CC immunological staining can be performed on the same specimen  
SQ Sequence 20 BP; 3 A; 4 C; 6 G; 7 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1729 ATTATCAGAAGGTGACA 1745  
| | | | | | | | | | | | | | |  
Db 19 ATTATCAGAAGGAGCCA 3

RESULT 4627  
AAT47265  
ID AAT47265 standard; RNA; 20 BP.





PI Mulshine JL, Tockman MS;  
XX WPI; 1998-240016/21.  
DR  
XX  
PT New isolated epithelial protein as early marker of cancer - useful in  
PT computer-assisted methods of diagnosis based on discriminant analysis of  
PT optical images of cells.  
XX  
XX  
PS Disclosure; Page 127; 159pp; English.  
XX  
CC This is the nucleotide sequence of a PCR primer used for amplification in  
CC the method of the invention. Probes and primers that hybridise to or  
CC amplify these peptides are used to diagnose precancerous states, e.g. of  
CC lung, liver, kidney, breast, prostate, head or neck, melanoma or myeloma,  
CC or to determine susceptibility to these conditions and for monitoring  
CC treatment. Precancer is also indicated by detecting post-translational  
CC modification of the epithelial peptide which is a marker of epithelial  
CC cell transformation. Antibodies are potentially useful for diagnosis and  
CC treatment of cancer  
XX  
SQ Sequence 20 BP; 9 A; 4 C; 5 G; 2 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 1199 ATGGCAGCTAGGAAGAA 1215  
Db ||||| |||||  
4 ATGGCAATAGGAAGAA 20  
  
RESULT 4630  
AAV16787  
ID AAV16787 standard; DNA; 20 BP.  
XX  
AC AAV16787;  
XX  
DT 06-JUL-1998 (first entry)  
XX  
DE Primer Sf MI -25+ for Sf9 alpha-mannosidase I cDNA.  
XX  
KW Sf9 cell; alpha-mannosidase I; PCR primer; ss.  
XX  
OS Synthetic.  
OS Lepidoptera.  
XX  
PN W09806855-A1.  
XX  
PD 19-FEB-1998.  
XX  
PF 15-AUG-1997; 97WO-US014504.  
XX  
PR 16-AUG-1996; 96US-0024078P.  
XX  
PA (TEXA ) UNIV TEXAS A & M SYSTEM.  
PA (SWBI-) SOUTHWEST FOUND BIOMEDICAL RES.  
XX  
PI Jarvis DL, Lanford R;  
XX  
DR WPI; 1998-159546/14.  
XX  
PT New baculovirus expression system - expresses galactosyl:transferase and  
PT desired protein, used particularly for treating hepatocyte(s).  
XX  
PS Example 16; Page 154; 247pp; English.  
XX  
CC The present sequence is a primer for the cDNA encoding alpha-mannosidase  
CC I, which was isolated from lepidopteran Sf9 cells  
XX  
SQ Sequence 20 BP; 2 A; 2 C; 7 G; 9 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
  
PI Mulshine JL, Tockman MS;  
XX WPI; 1998-240016/21.  
DR  
XX  
PT New isolated epithelial protein as early marker of cancer - useful in  
PT computer-assisted methods of diagnosis based on discriminant analysis of  
PT optical images of cells.  
XX  
XX  
PS Disclosure; Page 127; 159pp; English.  
XX  
CC This is the nucleotide sequence of a PCR primer used for amplification in  
CC the method of the invention. Probes and primers that hybridise to or  
CC amplify these peptides are used to diagnose precancerous states, e.g. of  
CC lung, liver, kidney, breast, prostate, head or neck, melanoma or myeloma,  
CC or to determine susceptibility to these conditions and for monitoring  
CC treatment. Precancer is also indicated by detecting post-translational  
CC modification of the epithelial peptide which is a marker of epithelial  
CC cell transformation. Antibodies are potentially useful for diagnosis and  
CC treatment of cancer  
XX  
SQ Sequence 20 BP; 9 A; 4 C; 5 G; 2 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 1199 ATGGCAGCTAGGAAGAA 1215  
Db ||||| |||||  
4 ATGGCAATAGGAAGAA 20  
  
RESULT 4630  
AAV16787  
ID AAV16787 standard; DNA; 20 BP.  
XX  
AC AAV16787;  
XX  
DT 06-JUL-1998 (first entry)  
XX  
DE Primer Sf MI -25+ for Sf9 alpha-mannosidase I cDNA.  
XX  
KW Sf9 cell; alpha-mannosidase I; PCR primer; ss.  
XX  
OS Synthetic.  
OS Lepidoptera.  
XX  
PN W09806855-A1.  
XX  
PD 19-FEB-1998.  
XX  
PF 15-AUG-1997; 97WO-US014504.  
XX  
PR 16-AUG-1996; 96US-0024078P.  
XX  
PA (TEXA ) UNIV TEXAS A & M SYSTEM.  
PA (SWBI-) SOUTHWEST FOUND BIOMEDICAL RES.  
XX  
PI Jarvis DL, Lanford R;  
XX  
DR WPI; 1998-159546/14.  
XX  
PT New baculovirus expression system - expresses galactosyl:transferase and  
PT desired protein, used particularly for treating hepatocyte(s).  
XX  
PS Example 16; Page 154; 247pp; English.  
XX  
CC The present sequence is a primer for the cDNA encoding alpha-mannosidase  
CC I, which was isolated from lepidopteran Sf9 cells  
XX  
SQ Sequence 20 BP; 2 A; 2 C; 7 G; 9 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
  
PI Mulshine JL, Tockman MS;  
XX WPI; 1998-240016/21.  
DR  
XX  
PT New isolated epithelial protein as early marker of cancer - useful in  
PT computer-assisted methods of diagnosis based on discriminant analysis of  
PT optical images of cells.  
XX  
XX  
PS Disclosure; Page 127; 159pp; English.  
XX  
CC This is the nucleotide sequence of a PCR primer used for amplification in  
CC the method of the invention. Probes and primers that hybridise to or  
CC amplify these peptides are used to diagnose precancerous states, e.g. of  
CC lung, liver, kidney, breast, prostate, head or neck, melanoma or myeloma,  
CC or to determine susceptibility to these conditions and for monitoring  
CC treatment. Precancer is also indicated by detecting post-translational  
CC modification of the epithelial peptide which is a marker of epithelial  
CC cell transformation. Antibodies are potentially useful for diagnosis and  
CC treatment of cancer  
XX  
SQ Sequence 20 BP; 9 A; 4 C; 5 G; 2 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 1199 ATGGCAGCTAGGAAGAA 1215  
Db ||||| |||||  
4 ATGGCAATAGGAAGAA 20  
  
RESULT 4630  
AAV16787  
ID AAV16787 standard; DNA; 20 BP.  
XX  
AC AAV16787;  
XX  
DT 06-JUL-1998 (first entry)  
XX  
DE Primer Sf MI -25+ for Sf9 alpha-mannosidase I cDNA.  
XX  
KW Sf9 cell; alpha-mannosidase I; PCR primer; ss.  
XX  
OS Synthetic.  
OS Lepidoptera.  
XX  
PN W09806855-A1.  
XX  
PD 19-FEB-1998.  
XX  
PF 15-AUG-1997; 97WO-US014504.  
XX  
PR 16-AUG-1996; 96US-0024078P.  
XX  
PA (TEXA ) UNIV TEXAS A & M SYSTEM.  
PA (SWBI-) SOUTHWEST FOUND BIOMEDICAL RES.  
XX  
PI Jarvis DL, Lanford R;  
XX  
DR WPI; 1998-159546/14.  
XX  
PT New baculovirus expression system - expresses galactosyl:transferase and  
PT desired protein, used particularly for treating hepatocyte(s).  
XX  
PS Example 16; Page 154; 247pp; English.  
XX  
CC The present sequence is a primer for the cDNA encoding alpha-mannosidase  
CC I, which was isolated from lepidopteran Sf9 cells  
XX  
SQ Sequence 20 BP; 2 A; 2 C; 7 G; 9 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 1199 ATGGCAGCTAGGAAGAA 1215  
Db ||||| |||||  
4 ATGGCAATAGGAAGAA 20  
  
RESULT 4630  
AAV16787  
ID AAV16787 standard; DNA; 20 BP.  
XX  
AC AAV16787;  
XX  
DT 06-JUL-1998 (first entry)  
XX  
DE Primer Sf MI -25+ for Sf9 alpha-mannosidase I cDNA.  
XX  
KW Sf9 cell; alpha-mannosidase I; PCR primer; ss.  
XX  
OS Synthetic.  
OS Homo sapiens.  
XX  
FH Key Location/Qualifiers  
FT modified\_base 1..20  
FT FT /\*tag= a  
FT FT /note= "phosphorothioate backbone"  
XX  
PN US5801154-A.  
XX  
PD 01-SEP-1998.  
XX  
PF 08-APR-1997; 97US-00835770.  
XX  
PR 18-OCT-1993; 93US-00136811.  
PR 16-APR-1996; 96US-00628731.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Bennett CF, Dean NM, Baracchini E;  
XX  
DR WPI; 1998-494825/42.  
XX  
PT Anti-sense oligo:nucleotide(s) inhibiting multi:drug resistance protein  
PT expression - useful for increasing the efficacy of drugs that certain  
PT conditions have become resistant to e.g. small cell lung cancer.  
XX  
PS Claim 18; Col 10; 29pp; English.  
XX  
CC This is the nucleotide sequence of the phosphorothioate oligonucleotide  
CC used in the method of the invention, involving the used of antisense  
CC oligonucleotides to inhibit multidrug resistance. The oligonucleotides  
CC are used for the antisense inhibition of multiresistant proteins (MRPs).  
CC These proteins are commonly found in some cancers which initially respond  
CC to chemotherapy, but overexpression of the protein leads to chemotherapy  
CC drug resistance. They are administered with the drugs to attempt to  
CC enhance efficacy of the drugs. MRPs are also expressed in other ailments,  
CC and as such, the oligonucleotides can be used to treat these conditions  
CC as well. The sequences are based on the human MRP and are used to treat  
CC conditions such as cancers, especially small-cell lung cancer, prevention  
CC of development of multidrug resistance during chemotherapy, and treatment  
CC of conditions characterised by leukotriene production, especially  
CC inflammatory conditions. (Updated on 25-MAR-2003 to correct PF field.)  
XX  
SQ Sequence 20 BP; 0 A; 7 C; 12 G; 1 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 51 GCGGCGGGCGGCGGC 67

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 2346 GTGGAGGTTCTGTATTT 2362  
Db ||||| ||||| |||||  
1 GTGTAGGTTCTGTGTTT 17  
  
RESULT 4631  
AAV53579  
ID AAV53579 standard; DNA; 20 BP.  
XX  
AC AAV53579;  
XX  
DT 25-MAR-2003 (revised)  
DT 20-NOV-1998 (first entry)  
XX  
DE Nucleotide sequence of a phosphorothioate oligonucleotide 4.  
XX  
KW Phosphorothioate oligonucleotide; antisense; inhibition; cancer;  
KW multidrug resistance; multiresistant protein; MRP; chemotherapy; human;  
KW leukotriene; inflammatory condition; ss.  
XX  
OS Synthetic.  
OS Homo sapiens.  
XX  
FH Key Location/Qualifiers  
FT modified\_base 1..20  
FT FT /\*tag= a  
FT FT /note= "phosphorothioate backbone"  
XX  
PN US5801154-A.  
XX  
PD 01-SEP-1998.  
XX  
PF 08-APR-1997; 97US-00835770.  
XX  
PR 18-OCT-1993; 93US-00136811.  
PR 16-APR-1996; 96US-00628731.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Bennett CF, Dean NM, Baracchini E;  
XX  
DR WPI; 1998-494825/42.  
XX  
PT Anti-sense oligo:nucleotide(s) inhibiting multi:drug resistance protein  
PT expression - useful for increasing the efficacy of drugs that certain  
PT conditions have become resistant to e.g. small cell lung cancer.  
XX  
PS Claim 18; Col 10; 29pp; English.  
XX  
CC This is the nucleotide sequence of the phosphorothioate oligonucleotide  
CC used in the method of the invention, involving the used of antisense  
CC oligonucleotides to inhibit multidrug resistance. The oligonucleotides  
CC are used for the antisense inhibition of multiresistant proteins (MRPs).  
CC These proteins are commonly found in some cancers which initially respond  
CC to chemotherapy, but overexpression of the protein leads to chemotherapy  
CC drug resistance. They are administered with the drugs to attempt to  
CC enhance efficacy of the drugs. MRPs are also expressed in other ailments,  
CC and as such, the oligonucleotides can be used to treat these conditions  
CC as well. The sequences are based on the human MRP and are used to treat  
CC conditions such as cancers, especially small-cell lung cancer, prevention  
CC of development of multidrug resistance during chemotherapy, and treatment  
CC of conditions characterised by leukotriene production, especially  
CC inflammatory conditions. (Updated on 25-MAR-2003 to correct PF field.)  
XX  
SQ Sequence 20 BP; 0 A; 7 C; 12 G; 1 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 51 GCGGCGGGCGGCGGC 67

Db 4 GTGGCGGGCGGGCGGC 20

RESULT 4632  
AAV19518  
ID AAV19518 standard; DNA; 20 BP.  
XX  
AC AAV19518;  
XX  
DT 16-JUL-1998 (first entry)  
XX  
DE Retroviral DNA base sequences amplifying primer MZ8.  
XX  
DE Retrovirus; AIDS; serum; HIV; human immunodeficiency virus;  
KW antigen measurement; diagnosis; nested PCR primer; ss.  
KW  
XX  
OS Synthetic.  
OS Human immunodeficiency virus 2.  
XX  
PN JP10094394-A.  
XX  
PD 14-APR-1998.  
XX  
PF 20-SEP-1996; 96JP-00271467.  
XX  
PR 20-SEP-1996; 96JP-00271467.  
XX  
PA (EIKE ) EIKEN KAGAKU KK.  
XX  
DR WPI; 1998-279230/25.  
XX  
PT Retrovirus reacting with AIDS patient serum - useful for the exact  
PT diagnosis of an unknown AIDS causing virus.  
XX  
PS Example; Page 7; 16pp; Japanese.  
XX

This primer is used in the nested PCR amplification of the DNA base sequences isolated from a retrovirus particle collected from the blood of an AIDS patient. The specification provides DNA base sequences encoding a retroviral protein which reacts with serum of AIDS patients. It provides an antigen for the detection of an antibody against retrovirus which consists of a peptide derived from these base sequences. The invention provides a method for antigen measurement in which the above antigen is contacted with a sample blood to determine immunoglobulin reacting with the antigen and a method for screening the infection of retrovirus other than HIV-1, HIV-2 subtype A which can be collected from an AIDS patient blood by the above antibody measurement. The method can diagnose exactly an unknown AIDS-causing virus

Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1729 ATTATCAGAAGGTGACA 1745  
Db 3 ATTATCAGAAGGAGCCA 19

RESULT 4633  
AAV68581/c  
ID AAV68581 standard; DNA; 20 BP.  
XX  
AC AAV68581;  
XX  
DT 16-FEB-1999 (first entry)  
XX  
DE Nucleotide sequence of a detection primer.  
KW Detection primer; hybridisation; Strand Displacement Amplification; SDA;  
KW RNA target; RNA-related disease; viraemas; upregulation; cancer; ss.

XX Synthetic.  
OS  
XX EP878553-A2.  
PN  
XX 18-NOV-1998.  
PD  
XX  
XX 05-MAY-1998; 98EP-00108154.  
PF  
XX 08-MAY-1997; 97US-00854041.  
PR  
XX (BECT ) BECTON DICKINSON & CO.  
PA  
XX Pearson RE, Dickson JA, Mehrpouyan M;  
PI  
XX WPI; 1998-585754/50.  
DR  
XX Amplification of RNA targets - using reverse transcription Strand  
PT Displacement Amplification.  
XX  
XX Example 1; Page 8; 14pp; English.  
PS  
XX This is a detection primer (probe) used in the method of the invention to  
CC amplify a target sequence involving Strand Displacement Amplification  
CC (SDA). Amplification of RNA targets by SDA is useful in diagnostics, and  
CC is especially useful for monitoring RNA-related diseases including  
CC viraemas and upregulation of cancer genes  
XX  
SQ Sequence 20 BP; 3 A; 4 C; 6 G; 7 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1729 ATTATCAGAAGGTGACA 1745  
Db 19 ATTATCAGAAGGAGCCA 3

RESULT 4634  
AAV28931/c  
ID AAV28931 standard; DNA; 20 BP.  
XX  
AC AAV28931;  
XX  
DT 05-AUG-1998 (first entry)  
XX  
DE Bovine Nramp1 cloning PCR primer 1R.  
XX  
KW Bovine; Nramp1; artiodactyla; ungulate; intracellular parasite; bison;  
KW susceptibility; resistance; tuberculosis; ruminant; PCR primer; ss.  
XX

Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1729 ATTATCAGAAGGTGACA 1745  
Db 3 ATTATCAGAAGGAGCCA 19

RESULT 4633  
AAV68581/c  
ID AAV68581 standard; DNA; 20 BP.  
XX  
AC AAV68581;  
XX  
DT 16-FEB-1999 (first entry)  
XX  
DE Nucleotide sequence of a detection primer.  
KW Detection primer; hybridisation; Strand Displacement Amplification; SDA;  
KW RNA target; RNA-related disease; viraemas; upregulation; cancer; ss.

PT analysing the genetic material for sequences associated with bovine  
PT Nramp1, for determining resistance or susceptibility to infection.  
XX  
PS Example 1; Fig 1B; 76pp; English.  
XX  
CC A method has been developed for screening animals for resistance or  
CC susceptibility to disease. The method comprises analysing an animal's  
CC genome for specific genetic sequences associated with bovine Nramp1,  
CC where the genetic sequences are associated with susceptibility or  
CC resistance of an animal to disease caused by intracellular parasites. The  
CC present sequence represents a PCR primer used in an example of the  
CC present invention for cloning bovine Nramp1. The present invention also  
CC describes a method for screening animals for susceptibility to disease,  
CC and a method for predicting the likelihood of an animal being resistant  
CC to disease caused by intracellular parasites. The methods can be used for  
CC identifying animals that are resistant or susceptible to diseases such as  
CC artiodactyla brucellosis, ungulate brucellosis, tuberculosis,  
CC paratuberculosis or salmonellosis. The animals may be e.g. artiodactyla,  
CC ungulate or ruminant (specifically bovine or bison). Susceptible animals  
CC can be segregated, prophylactically or therapeutically treated or  
CC sacrificed. Resistant animals can be safely handled, used to produce food  
CC stuffs, and/or bred to produce disease resistant animals  
XX  
SQ Sequence 20 BP; 5 A; 6 C; 5 G; 4 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 2650 ACCCTAAGGTGAGTGTG 2666  
Db 18 ACCCTAAGGTGAGCTTG 2  
RESULT 4635  
AAX36926  
ID AAX36926 standard; DNA; 20 BP.  
XX  
AC AAX36926;  
XX  
DT 02-JUL-1999 (first entry)  
XX  
DE S. cereale microsatellite marker PCR primer 25.  
XX  
KW Microsatellite; marker; PCR primer; rye; plant; Triticeae; Poae;  
KW simple sequence repeat; SSR; sequence tag site; STS; genetic analysis;  
KW DNA fingerprinting; variety identification; self fertilization;  
KW detection; cross fertilization; cytological line; gene mapping;  
KW monogenic trait; polygenic trait; ss.  
XX  
OS Synthetic.  
OS Secale cereale.  
XX  
PN DE19835109-A1.  
XX  
PD 15-APR-1999.  
XX  
PF 04-AUG-1998; 98DE-01035109.  
XX  
PR 02-OCT-1997; 97DE-01043671.  
XX  
PA (GVSE-) GVS GBS ERWERB & VERWERTUNG LANDWIRTSCHA.  
XX  
PI Wricke G, Saal B;  
XX  
XX WPI; 1999-245522/21.  
DR  
XX Microsatellite markers derived from the genome of rye, useful for genetic  
PT mapping as markers of monogenic or polygenic traits.  
PT  
XX Claim 6; Page 15; 28pp; German.  
PS  
XX This invention describes Secale cereale microsatellite markers based on

CC hypervariable genomic segments of Secale cereale and plants of the tribes  
CC Triticeae and Poae. The microsatellite markers comprise a simple  
CC sequence repeat (SSR) marker as sequence tag site (STS), defined by two  
CC specific S. cereale defined primers, of mean length 18-26 bases and  
CC flanking the microsatellite sequence (MSS). Such markers are useful for  
CC genetic analysis of rye, triticeae and other species of the tribes  
CC Triticeae and Poae, e.g. for DNA fingerprinting; identification of  
CC varieties; detecting self or cross fertilization; studying similarity and  
CC relatedness; characterization of cytological lines, or generally any sort  
CC of gene mapping. Particularly, they are useful for genetic mapping and  
CC marking of mono- or poly-genic traits, selection and evaluation of  
CC varietal purity or checking culture stages (particularly in hybrid  
CC culture methods), purity of propagative materials, success of self-  
CC fertilization and required ratio of components in populations and  
CC hybrids. AAX36902-X36965 represent PCR primers used in the method of the  
CC invention  
XX  
SQ Sequence 20 BP; 4 A; 8 C; 4 G; 4 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 329 CAGCCGCCACCCTACTT 345  
Db 3 CAGCCGCCACCCTTAATT 19  
RESULT 4636  
AAX74259  
ID AAX74259 standard; DNA; 20 BP.  
XX  
AC AAX74259;  
XX  
DT 20-MAR-2003 (revised)  
DT 15-MAR-1999 (first entry)  
XX  
DE CpG-N motif oligonucleotide #6.  
XX  
KW CpG-N motif; immunostimulation; antigen; CpG-S motif; immunisation;  
KW viral antigen; bacterial antigen; parasite; therapeutic; growth factor;  
KW toxin; tumour suppressor; cytokine; apoptotic protein; interferon;  
KW hormone; clotting factor; ligand; receptor; ss.  
XX  
OS Synthetic.  
XX  
PN WO9852581-A1.  
XX  
PD 26-NOV-1998.  
XX  
PF 20-MAY-1998; 98WO-US010408.  
XX  
PR 20-MAY-1997; 97US-0047209P.  
PR 20-MAY-1997; 97US-0047233P.  
XX  
PA (OTTA-) OTTAWA CIVIC HOSPITAL LOEB RES INST.  
PA (IOWA ) UNIV IOWA RES FOUND.  
PA (QIAG-) QIAGEN GMBH.  
XX  
PI Davis HL, Krieg AM, Schorr J, Wu T;  
XX  
DR WPI; 1999-059712/05.  
XX  
PT Use of neutralising CpG and stimulating CpG motifs in DNA vectors - for  
PT enhancing the immunostimulatory effect of an antigen or enhancing the  
PT expression of a therapeutic polypeptide.  
XX  
PS Example 5; Page 73; 109pp; English.  
XX  
CC AAX74254-V74261 are oligonucleotides used to describe a method for  
CC enhancing the immunostimulatory effect of an antigen encoded by nucleic  
CC acid contained in a nucleic acid construct. The method involves  
CC determining the CpG-N and CpG-S motifs present in the construct, removing



CC neutralising CpG (CpG-N) motifs and optionally inserting stimulatory CpG  
CC (CpG-S) motifs in the construct, thereby producing a nucleic acid  
CC construct having enhanced immunostimulatory efficacy. The method can be  
CC used for immunisation against viral antigens, e.g. from hepatitis B virus  
CC (HBV), bacterial antigens or an antigen derived from a parasite. They can  
CC also be used for expression of a therapeutic polypeptide, e.g. growth  
CC factors, toxins, tumour suppressors, cytokines, apoptotic proteins,  
CC interferons, hormones, clotting factors, ligands and receptors. (Updated  
CC on 20-MAR-2003 to correct PA field.)

XX Sequence 20 BP; 0 A; 10 C; 10 G; 0 T; 0 U; 0 Other;  
SQ

Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 520 CGGGCGCCGGCCGGCC 536  
Db 2 CGGCCGGCCGGCCGGCC 18

RESULT 4637  
AAV74259/C

ID AAV74259 standard; DNA; 20 BP.  
XX  
AC AAV74259;  
DT 20-MAR-2003 (revised)  
DT 15-MAR-1999 (first entry)  
XX  
DE CpG-N motif oligonucleotide #6.  
XX  
KW CpG-N motif; immunostimulation; antigen; CpG-S motif; immunisation;  
KW viral antigen; bacterial antigen; parasite; therapeutic; growth factor;  
KW toxin; tumour suppressor; cytokine; apoptotic protein; interferon;  
KW hormone; clotting factor; ligand; receptor; ss.  
XX  
OS Synthetic.  
XX  
PN WO9852581-A1.  
XX  
PD 26-NOV-1998.  
XX  
PF 20-MAY-1998; 98WO-US010408.  
XX  
PR 20-MAY-1997; 97US-0047209P.  
PR 20-MAY-1997; 97US-0047233P.  
XX  
PA (OTTA-) OTTAWA CIVIC HOSPITAL LOEB RES INST.  
PA (IOWA) UNIV IOWA RES FOUND.  
PA (QIAG-) QIAGEN GMBH.  
XX  
PI Davis HL, Krieg AM, Schorr J, Wu T;  
XX WPI; 1999-059712/05.  
DR

XX Use of neutralising CpG and stimulating CpG motifs in DNA vectors - for  
PT enhancing the immunostimulatory effect of an antigen or enhancing the  
PT expression of a therapeutic polypeptide.  
XX  
PS Example 5; Page 73; 109pp; English.  
XX  
CC AAV74254-V74261 are oligonucleotides used to describe a method for  
CC enhancing the immunostimulatory effect of an antigen encoded by nucleic  
CC acid contained in a nucleic acid construct. The method involves  
CC determining the CpG-N and CpG-S motifs present in the construct, removing  
CC neutralising CpG (CpG-N) motifs and optionally inserting stimulatory CpG  
CC (CpG-S) motifs in the construct, thereby producing a nucleic acid  
CC construct having enhanced immunostimulatory efficacy. The method can be  
CC used for immunisation against viral antigens, e.g. from hepatitis B virus  
CC (HBV), bacterial antigens or an antigen derived from a parasite. They can  
CC also be used for expression of a therapeutic polypeptide, e.g. growth  
CC factors, toxins, tumour suppressors, cytokines, apoptotic proteins,

CC interferons, hormones, clotting factors, ligands and receptors. (Updated  
CC on 20-MAR-2003 to correct PA field.)

XX Sequence 20 BP; 0 A; 10 C; 10 G; 0 T; 0 U; 0 Other;  
SQ

Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 520 CGGGCGCCGGCCGGCC 536  
Db 19 CGGCCGGCCGGCCGGCC 3

RESULT 4638  
AAZ02544/C

ID AAZ02544 standard; DNA; 20 BP.  
XX  
AC AAZ02544;  
XX  
DT 07-OCT-1999 (first entry)  
XX  
DE PCR primer used to amplify an ORF of Chlamydia trachomatis.  
XX  
KW Vaccine; eye disease; conventional trachoma; nonendemic trachoma;  
KW paratrachoma; inclusion conjunctivitis; genital disease; perihepatitis;  
KW nongonococcal urethritis; epididymitis; cervicitis; salpingitis; PCR primer;  
KW bartholinitis; pneumopathy; venereal lymphogranulomatosis; ss.  
XX  
OS Synthetic.  
OS Chlamydia trachomatis.  
XX  
PN WO9928475-A2.  
XX  
PD 10-JUN-1999.  
XX  
PF 27-NOV-1998; 98WO-IB001939.  
XX  
PR 28-NOV-1997; 97FR-00015041.  
PR 17-DEC-1997; 97FR-00016034.  
PR 04-NOV-1998; 98US-0107077P.  
XX  
PA (GEST) GENSET.  
XX  
PI Griffais R;  
XX  
DR WPI; 1999-371125/31.  
XX  
PT Genome sequence of Chlamydia trachomatis.  
XX  
PS Disclosure; Page 1533; 1755pp; English.  
XX

CC PCR primers AAZ01426-206209 were used to amplify open reading frames  
CC (ORFs) of the genome of Chlamydia trachomatis (see AAZ01425). These ORFs  
CC encode polypeptides (see AAY36754-Y37949) which can be used as vaccines  
CC against Chlamydia trachomatis. Antisense and ribozyme sequences can also  
CC be used to control growth of the microorganism. Chlamydia trachomatis is  
CC responsible for a large number of diseases, e.g. eye diseases such as  
CC conventional trachoma, nonendemic trachoma, paratrachoma, and inclusion  
CC conjunctivitis; genital diseases such as nongonococcal urethritis;  
CC epididymitis, cervicitis, salpingitis, perihepatitis, bartholinitis;  
CC pneumopathy in breast feeding infants; and venereal lymphogranulomatosis.  
CC The polypeptides of the invention may be of use in treating these  
CC diseases  
XX  
SQ Sequence 20 BP; 7 A; 10 C; 0 G; 3 T; 0 U; 0 Other;  
XX

Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 116 TGGGGGGATCCTGGATT 132  
|||||

Db 20 TGGGGGGATTATGGATT 4

RESULT 4639  
AAZ02339/c

ID AAZ02339 standard; DNA; 20 BP.

XX  
AC AAZ02339;  
XX  
DT 07-OCT-1999 (first entry)  
XX  
DE PCR primer used to amplify an ORF of Chlamydia trachomatis.  
XX  
KW Vaccine; eye disease; conventional trachoma; nonendemic trachoma;  
KW paratrachoma; inclusion conjunctivitis; genital disease; perihhepatitis;  
KW nongonococcal urethritis; epidymitis; cervicitis; salpingitis; PCR primer;  
KW bartholinitis; pneumopathy; venereal lymphogranulomatosis; ss.  
XX  
OS Synthetic.  
OS Chlamydia trachomatis.  
XX  
PN WO9928475-A2.  
XX  
PD 10-JUN-1999.  
XX  
KW Vaccine; eye disease; conventional trachoma; nonendemic trachoma;  
KW paratrachoma; inclusion conjunctivitis; genital disease; perihhepatitis;  
KW nongonococcal urethritis; epidymitis; cervicitis; salpingitis; PCR primer;  
KW bartholinitis; pneumopathy; venereal lymphogranulomatosis; ss.  
XX  
OS Synthetic.  
OS Chlamydia trachomatis.  
XX  
PN WO9928475-A2.  
XX  
PD 10-JUN-1999.  
XX  
PF 27-NOV-1998; 98WO-IB001939.  
XX  
PR 28-NOV-1997; 97FR-00015041.  
PR 17-DEC-1997; 97FR-00016034.  
PR 04-NOV-1998; 98US-0107077P.  
XX  
PA (GEST ) GENSET.  
XX  
PI Griffais R;  
XX  
DR WPI; 1999-371125/31.  
XX  
PT Genome sequence of Chlamydia trachomatis.  
XX  
PS Disclosure; Page 1516; 1755pp; English.  
XX  
CC PCR primers AAZ01426-Z06209 were used to amplify open reading frames  
CC (ORFs) of the genome of Chlamydia trachomatis (see AAZ01425). These ORFs  
CC encode polypeptides (see AAY36754-Y37949) which can be used as vaccines  
CC against Chlamydia trachomatis. Antisense and ribozyme sequences can also  
CC be used to control growth of the microorganism. Chlamydia trachomatis is  
CC responsible for a large number of diseases, e.g. eye diseases such as  
CC conventional trachoma, nonendemic trachoma, paratrachoma, and inclusion  
CC conjunctivitis; genital diseases such as nongonococcal urethritis,  
CC epidymitis, cervicitis, salpingitis, perihhepatitis, bartholinitis;  
CC pneumopathy in breast feeding infants; and venereal lymphogranulomatosis.  
CC The polypeptides of the invention may be of use in treating these  
CC diseases  
XX  
SQ Sequence 20 BP; 1 A; 9 C; 3 G; 7 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 898 GGCTGAAGTACAGAGGC 914  
|| |||||  
Db 18 GGGAGAAGTACAGAGGC 2

RESULT 4640  
AAZ03397

ID AAZ03397 standard; DNA; 20 BP.

XX  
AC AAZ03397;  
XX  
DT 07-OCT-1999 (first entry)  
XX

DE PCR primer used to amplify an ORF of Chlamydia trachomatis.  
XX  
KW Vaccine; eye disease; conventional trachoma; nonendemic trachoma;  
KW paratrachoma; inclusion conjunctivitis; genital disease; perihhepatitis;  
KW nongonococcal urethritis; epidymitis; cervicitis; salpingitis; PCR primer;  
KW bartholinitis; pneumopathy; venereal lymphogranulomatosis; ss.  
XX  
OS Synthetic.  
OS Chlamydia trachomatis.  
XX  
PN WO9928475-A2.  
XX  
PD 10-JUN-1999.  
XX  
PF 27-NOV-1998; 98WO-IB001939.  
XX  
PR 28-NOV-1997; 97FR-00015041.  
PR 17-DEC-1997; 97FR-00016034.  
PR 04-NOV-1998; 98US-0107077P.  
XX  
PA (GEST ) GENSET.  
XX  
PI Griffais R;  
XX  
DR WPI; 1999-371125/31.  
XX  
PT Genome sequence of Chlamydia trachomatis.  
XX  
PS Disclosure; Page 1603; 1755pp; English.  
XX  
CC PCR primers AAZ01426-Z06209 were used to amplify open reading frames  
CC (ORFs) of the genome of Chlamydia trachomatis (see AAZ01425). These ORFs  
CC encode polypeptides (see AAY36754-Y37949) which can be used as vaccines  
CC against Chlamydia trachomatis. Antisense and ribozyme sequences can also  
CC be used to control growth of the microorganism. Chlamydia trachomatis is  
CC responsible for a large number of diseases, e.g. eye diseases such as  
CC conventional trachoma, nonendemic trachoma, paratrachoma, and inclusion  
CC conjunctivitis; genital diseases such as nongonococcal urethritis,  
CC epidymitis, cervicitis, salpingitis, perihhepatitis, bartholinitis;  
CC pneumopathy in breast feeding infants; and venereal lymphogranulomatosis.  
CC The polypeptides of the invention may be of use in treating these  
CC diseases  
XX  
SQ Sequence 20 BP; 4 A; 7 C; 3 G; 6 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1398 CCTGCGAAGTACATC 1414  
|| |||||  
Db 3 CCTGCGAGATCTACATC 19

RESULT 4641  
AAZ02828

ID AAZ02828 standard; DNA; 20 BP.

XX  
AC AAZ02828;  
XX  
DT 07-OCT-1999 (first entry)  
XX  
DE PCR primer used to amplify an ORF of Chlamydia trachomatis.  
XX  
KW Vaccine; eye disease; conventional trachoma; nonendemic trachoma;  
KW paratrachoma; inclusion conjunctivitis; genital disease; perihhepatitis;  
KW nongonococcal urethritis; epidymitis; cervicitis; salpingitis; PCR primer;  
KW bartholinitis; pneumopathy; venereal lymphogranulomatosis; ss.  
XX  
OS Synthetic.  
OS Chlamydia trachomatis.  
XX  
PN WO9928475-A2.

XX 10-JUN-1999.  
XX 27-NOV-1998; 98WO-IB001939.  
XX 28-NOV-1997; 97FR-00015041.  
PR 17-DEC-1997; 97FR-00016034.  
PR 04-NOV-1998; 98US-0107077P.  
XX (GEST ) GENSET.  
XX Griffais R;  
PI WPI; 1999-371125/31.  
XX Genome sequence of Chlamydia trachomatis.  
PT Disclosure; Page 1556; 1755pp; English.  
XX PCR primers AAZ01426-206209 were used to amplify open reading frames  
CC (ORFs) of the genome of Chlamydia trachomatis (see AAZ01425). These ORFs  
CC encode polypeptides (see AAY36754-Y37949) which can be used as vaccines  
CC against Chlamydia trachomatis. Antisense and ribozyme sequences can also  
CC be used to control growth of the microorganism. Chlamydia trachomatis is  
CC responsible for a large number of diseases, e.g. eye diseases such as  
CC conventional trachoma, nonendemic trachoma, paratrachoma, and inclusion  
CC conjunctivitis; genital diseases such as nongonococcal urethritis,  
CC epididymitis, cervicitis, salpingitis, perihepatitis, Bartholinitis;  
CC pneumopathy in breast feeding infants; and venereal lymphogranulomatosis.  
CC The polypeptides of the invention may be of use in treating these  
CC diseases  
XX Sequence 20 BP; 7 A; 7 C; 3 G; 3 T; 0 U; 0 Other;  
SQ Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1428 TTGTCATAGACAAATCC 1444  
Db 2 TCGTCATAGACAAACCC 18  
RESULT 4642  
AAZ26623  
ID AAX26623 standard; DNA; 20 BP.  
XX AAX26623;  
AC 15-JUN-1999 (first entry)  
XX PCR primer for amplification of human breast tumour cell line DNA.  
DT PCR primer for amplification of human breast tumour cell line DNA.  
DE Detection; basepair mismatch cleavage product; mutation; PCR primer; ss.  
XX Synthetic.  
OS WO9913108-A1.  
XX 18-MAR-1999.  
XX 10-SEP-1998; 98WO-US018776.  
XX 10-SEP-1997; 97US-0058419P.  
XX (UYMA-) UNIV MARYLAND BALTIMORE.  
PA (HSUI/) HSI I.  
PA (SHIH/) SHIH J W.  
PA (HIGH/) HIGHSMITH W E.  
PA (USSH ) US DEPT HEALTH & HUMAN SERVICES.  
XX Hsu I, Shih JW, Highsmith WB;  
PI Hsu I, Shih JW, Highsmith WB;  
XX

DR WPI; 1999-243734/20.  
XX Detection of DNA and RNA mismatch cleavage products.  
PT Example 1; Page 12; 42pp; English.  
XX The specification describes methods for detection of DNA and RNA basepair  
CC mismatch cleavage products, which indicates the presence and sequence of  
CC target DNA and RNA. Detection of the target is enhanced by amplification  
CC through recycling targets by maintaining an assay temperature between the  
CC melting point of the target/probe duplex and that of the target/product  
CC complex, in the presence of an amplifier. The methods are used to detect  
CC and quantify specific DNA and RNA targets, e.g. in genetic diseases or  
CC infectious agents. They can also be used to detect mutations. The methods  
CC of the invention recycle the targets to dramatically increase the  
CC sensitivity of the mismatch repair assay, and allows for detection of a  
CC million or fewer target DNA or RNA molecules. PCR primers AAX26623-24  
CC were used to exemplify the method of the invention  
XX Sequence 20 BP; 2 A; 8 C; 1 G; 9 T; 0 U; 0 Other;  
SQ Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 2623 AACCTTGCTCTCGTTCCCT 2639  
Db 4 AACCTTGCTCTCGTTCCCT 20  
RESULT 4643  
AAZ23851  
ID AAZ23851 standard; DNA; 20 BP.  
XX AAZ23851;  
AC 21-JAN-2000 (first entry)  
XX Rye microsatellite marker 13 PCR primer 1.  
DE Microsatellite marker; rye; hypervariable genomic region; Poaeae;  
KW Triticeae; breeding program; DNA fingerprinting; variety; detection;  
KW self pollination; cross pollination; cytoplasmic line; genetic mapping;  
KW polymorphism; PCR primer; ss.  
XX Synthetic.  
OS Secale cereale.  
XX DE19811506-A1.  
XX 21-OCT-1999.  
PD 17-MAR-1998; 98DE-01011506.  
XX 17-MAR-1998; 98DE-01011506.  
PR (GVSE-) GVS GES ERWERB & VERW LANDWIRTSCHAFTLICH.  
XX WPI; 1999-591715/51.  
XX New microsatellite markers for rye and closely related grasses, used for  
PT genetic analysis and in breeding.  
XX Claim 6; Page 27; 28pp; German.  
XX This invention describes novel microsatellite markers (MSM), based on the  
CC hypervariable genomic regions of rye (Secale cereale) and of plants from  
CC the tribes Triticeae and Poaeae. MSM, which are new genetic markers for  
CC rye and closely related species, are used for genetic analysis and in  
CC breeding programs. Typical applications are in DNA fingerprinting;  
CC identification of varieties; detection of self and cross pollination;  
CC characterization of cytoplasmic lines, and genetic mapping (of mono- or  
CC poly-genic traits). MSM show a higher degree of polymorphism than known

CC markers (both within and between different rye varieties and lines); can  
CC be detected by polymerase chain reaction, so that even very small samples  
CC may be analyzed, and generate many alleles per marker locus. AAZ23827-  
CC Z23886 represent the microsatellite marker PCR primers described in the  
CC method of the invention  
XX

SQ Sequence 20 BP; 4 A; 8 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 329 CAGCCGCCACCTACTT 345  
|||||  
Db 3 CAGCCGCCACCTTAATT 19  
|||||

RESULT 4644  
AAX93392/c  
ID AAX93392 standard; DNA; 20 BP.  
XX  
AC AAX93392;  
XX

DT 13-SEP-1999 (first entry)

DE PCR primer used to amplify an ORF of Chlamydia pneumoniae.

XX Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis;  
KW sinusitis; purulent otitis media; erythema nodosum; pharyngitis; vaccine;  
KW neutralising epitope; PCR primer; ss.

OS Synthetic.  
OS Chlamydophila pneumoniae.

XX WO9927105-A2.

XX 03-JUN-1999.

PF 20-NOV-1998; 98WO-IB001890.

XX 21-NOV-1997; 97FR-00014673.

PR 04-NOV-1998; 98US-0107078P.

XX (GEST ) GENSET.

PI Griffais R;

XX WPI; 1999-357842/30.

XX Genome sequence of Chlamydia pneumoniae.

PS Page 1588; Disclosure; 1912pp; English.

CC AAX91991-X97517 represent PCR primers used to amplify open reading frames  
CC and other nucleic acid sequences from the genome of Chlamydia pneumoniae  
CC (see AAX91990). C. pneumoniae causes respiratory disease such as  
CC pneumonia and bronchitis and is thought to be a contributing factor in  
CC heart disease, sarcoidosis, sinusitis, purulent otitis media, erythema  
CC nodosum or pharyngitis. The polypeptides encoded by the open reading  
CC frames of the C. pneumoniae genome (see AAY34584- AAY35879) can be used  
CC in immunogenic compositions as vaccines. Vectors containing C. pneumoniae  
CC nucleotides sequences can also be used as immunogenic compositions,  
CC especially where the vector directs the expression of a neutralising  
CC epitope of C. pneumoniae

XX Sequence 20 BP; 7 A; 3 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1590 ACTGGGACCCCTCTG 1606  
|||||

Db 17 ACTGCGAACCCCTCTTG 1

RESULT 4645

AAX95000

ID AAX95000 standard; DNA; 20 BP.

XX

AC AAX95000;

XX

DT 13-SEP-1999 (first entry)

XX

DE PCR primer used to amplify an ORF of Chlamydia pneumoniae.

XX

KW Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis;  
KW sinusitis; purulent otitis media; erythema nodosum; pharyngitis; vaccine;  
KW neutralising epitope; PCR primer; ss.

XX Synthetic.

OS Chlamydophila pneumoniae.

XX

PN WO9927105-A2.

XX

PD 03-JUN-1999.

XX

PF 20-NOV-1998; 98WO-IB001890.

XX

PR 21-NOV-1997; 97FR-00014673.

PR 04-NOV-1998; 98US-0107078P.

XX

PA (GEST ) GENSET.

XX

PI Griffais R;

XX

DR WPI; 1999-357842/30.

XX

PT Genome sequence of Chlamydia pneumoniae.

XX

PS Page 1713; Disclosure; 1912pp; English.

XX

CC AAX91991-X97517 represent PCR primers used to amplify open reading frames  
CC and other nucleic acid sequences from the genome of Chlamydia pneumoniae  
CC (see AAX91990). C. pneumoniae causes respiratory disease such as  
CC pneumonia and bronchitis and is thought to be a contributing factor in  
CC heart disease, sarcoidosis, sinusitis, purulent otitis media, erythema  
CC nodosum or pharyngitis. The polypeptides encoded by the open reading  
CC frames of the C. pneumoniae genome (see AAY34584- AAY35879) can be used  
CC in immunogenic compositions as vaccines. Vectors containing C. pneumoniae  
CC nucleotides sequences can also be used as immunogenic compositions,  
CC especially where the vector directs the expression of a neutralising  
CC epitope of C. pneumoniae

XX Sequence 20 BP; 5 A; 4 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1326 AGAACTGCTTGCTCAT 1342  
|||||

Db 3 AGAACTGCTTGCCAT 19  
|||||

RESULT 4646

AAX81592

ID AAX81592 standard; DNA; 20 BP.

XX

AC AAX81592;

XX

DT 26-AUG-1999 (first entry)

XX

DE PCR primer used to amplify erythrovirus V9 nucleotide sequences.

XX

KW Erythrovirus V9; differential diagnosis; parvovirus; infection;



XX erythrovirus screening; typing; immunoassay; PCR primer; ss.  
XX Synthetic.  
OS Erythrovirus.  
XX  
XX  
XX FR2771751-A1.  
XX  
XX  
XX 04-JUN-1999.  
XX  
XX  
XX 03-DEC-1997; 97ER-00015197.  
XX  
XX 03-DEC-1997; 97ER-00015197.  
XX  
XX (ASSI-) ASSISTANCE PUBLIQUE HOPITAUX PARIS.  
XX  
XX Nguyen QT, Garbarg CA, Auguste V;  
XX  
XX WPI; 1999-349543/30.  
XX  
XX Erythrovirus V9 and its nucleic acid sequences - can be used in the  
XX diagnosis of its infections.  
XX  
XX Claim 3; Page 23; 80pp; French.  
XX  
XX AAX81588-X81630 represent PCR primers used to amplify erythrovirus V9  
XX polynucleotide sequences. Probes and primers derived from erythrovirus V9  
XX polynucleotide sequences (AAX81580) can be used for differential  
XX diagnosis of erythrovirus (parvovirus) infections by a combination of  
XX amplification and hybridisation assay. The probes can also be used to  
XX assess susceptibility to erythrovirus infection and for erythrovirus  
XX screening and typing. The antibodies can be used in immunoassays for  
XX diagnosis of erythrovirus V9 infections  
XX  
XX Sequence 20 BP; 8 A; 4 C; 5 G; 3 T; 0 U; 0 Other;  
SQ  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 893 ACAGTGGCTGAAGTACA 909  
Db 1 ACAGAGGCTGATGTACA 17  
RESULT 4647  
AAX29455  
ID AAX29455 standard; DNA; 20 BP.  
XX  
XX AAX29455;  
XX  
XX 10-JUN-1999 (first entry)  
XX  
XX Rat JNK3-specific oligo ISIS No: 21912.  
XX  
XX Antisense oligonucleotide; Jun N-terminal kinase; JNK; hybridise; JNK1;  
KW JNK2; JNK3; cell cycle progression; phosphorylation; tumour; probe; rat;  
KW hyperproliferative; stress-activated protein kinase; p54; SAP; ss.  
XX  
XX Synthetic.  
OS Rattus norvegicus.  
XX  
XX WO9909214-A1.  
XX  
XX 25-FEB-1999.  
XX  
XX 07-AUG-1998; 98WO-US016488.  
XX  
XX 13-AUG-1997; 97US-00910629.  
XX  
XX (ISIS-) ISIS PHARM INC.  
PA  
XX Mckay R, Dean N, Monia BP, Nero PS, Gaarde WA;  
XX

DR WPI; 1999-181060/15.  
XX  
XX New antisense oligonucleotides that detect and modulate the expression of  
PT Jun N-terminal kinase proteins - useful for treating hyperproliferative  
PT diseases and inhibiting tumor growth in animals, and for modulating  
PT protein phosphorylation by these proteins.  
XX  
XX Example 7; Page 126; 190pp; English.  
XX  
XX The invention relates to antisense oligonucleotides that detect and  
CC modulate the expression of Jun N-terminal kinase (JNK) proteins. The  
CC oligonucleotides specifically hybridize to a nucleic acid encoding a  
CC JNK1, JNK2 or JNK3 protein, and which modulate expression of these  
CC proteins. The oligonucleotides are useful for modulating JNK protein  
CC expression and cell cycle progression in cultured cells or animal cells.  
CC The oligonucleotides are also useful for modulating the phosphorylation  
CC of a protein that has been phosphorylated by a JNK protein, and the  
CC expression of a cellular protein that promotes one or more metastatic  
CC events. The oligonucleotides also form pharmaceutical compositions for  
CC treating animals with a hyperproliferative disease, and for inhibiting  
CC tumor growth in an animal. The invention also provides sequences that can  
CC specifically hybridize to nucleic acids encoding rat stress activated  
CC protein kinase (SAP) or p54, a homologue of human JNK protein  
XX  
SQ Sequence 20 BP; 7 A; 4 C; 8 G; 1 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1457 GGAGACCAAGTCCAGC 1473  
Db 3 GGAGACCAAGTCCAGC 19  
RESULT 4648  
AAZ86719/c  
ID AAZ86719 standard; DNA; 20 BP.  
XX  
XX AAZ86719;  
XX  
XX 13-APR-2000 (first entry)  
XX  
XX Antisense inhibitor of human JNKK1, ISIS #101252.  
XX  
XX Antisense inhibitor; Jun N-terminal kinase kinase-1; JNKK; human;  
KW inflammation; infection; tumour; therapy; ss.  
XX  
XX Homo sapiens.  
XX  
XX US6010906-A.  
XX  
XX 04-JAN-2000.  
XX  
XX 21-JUL-1999; 99US-00358382.  
XX  
XX 21-JUL-1999; 99US-00358382.  
XX  
XX (ISIS-) ISIS PHARM INC.  
XX  
XX Ward DT, Cowser LM;  
XX  
XX WPI; 2000-115859/10.  
XX  
XX New antisense compounds that inhibit expression of human Jun N-terminal  
PT kinase kinase-1 are useful for treating, preventing or diagnosing  
PT infection.  
XX  
XX Example 15; Col 40; 32pp; English.  
XX  
XX This sequence represents an antisense oligonucleotide of the invention.  
CC The antisense oligonucleotides are inhibitors of the expression of human  
CC Jun N-terminal kinase kinase-1 (JNKK1). The antisense oligonucleotides

CC are used to treat or prevent diseases associated with JNK1 expression,  
CC in human or veterinary medicine, e.g. inflammation, infections or  
CC tumours. They can also be used as research or diagnostic reagents in  
CC hybridisation assays  
XX  
SQ Sequence 20 BP; 1 A; 10 C; 8 G; 1 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 48 CGCGCGCGCGCGCGC 64  
Db 19 CGAGCGCGCGCGCGC 3  
  
RESULT 4649  
AAZ49841/C  
ID AAZ49841 standard; cDNA; 20 BP.  
XX  
AC AAZ49841;  
XX  
DT 18-APR-2000 (first entry)  
XX  
DE PCR primer 28sst-110F for oat ACCase cDNA amplification.  
XX  
KW PCR primer; herbicide resistance; gene modification; herbicide;  
KW oat ACCase; maize acetyl CoA carboxylase; ACCase; plant oil content;  
KW marker-assisted plant selection; groat oil trait;  
KW restriction fragment length polymorphism mapping;  
KW high-energy animal feed; low-fat human food; ss.  
XX  
OS Zea mays.  
XX  
PN WO9967367-A1.  
XX  
PD 29-DEC-1999.  
XX  
PF 22-JUN-1999; 99WO-US014022.  
XX  
PR 22-JUN-1998; 98US-0090240P.  
PR 02-JUL-1998; 98US-0091640P.  
XX  
PA (MINU ) UNIV MINNESOTA.  
PA (USDA ) US DEPT OF AGRICULTURE.  
PA (EGLI/) EGLI M A.  
PA (GROH/) GROH S.  
PA (KIAN/) KIANIAN S F.  
PA (PHIL/) PHILLIPS R L.  
PA (RINE/) RINES H W.  
PA (SOME/) SOMERS D A.  
XX  
PI Egli MA, Groh S, Kianian SF, Phillips RL, Rines HW, Somers DA;  
XX  
DR WPI; 2000-147205/13.  
XX  
PT New DNA encoding acetyl-CoA carboxylase from oats, used to produce  
PT transformed plants with herbicide resistance and altered oil content.  
XX  
PS Example 7; Page 58; 197pp; English.  
XX  
CC The present sequence is a maize PCR primer 28sst-110F for amplification  
CC of oat ACCase (acetyl CoA carboxylase) cDNA. The primer is located within  
CC the transcarboxylase domain, surrounding the acetyl CoA binding site of  
CC ACCase. Transformation of plants with ACCase imparts resistance to  
CC cyclohexanedione and aryloxyphenoxypyranoic acid herbicides and alter  
CC the oil content. The ACCase DNA is also used as source of probes and  
CC primers for the identification of transgenic plants; in marker-assisted  
CC plant selection and for restriction fragment length polymorphism mapping,  
CC used for high-energy animal feed and high-fiber, low-fat human food and  
CC in genetic dissection of the groat oil trait  
XX  
SQ Sequence 20 BP; 4 A; 3 C; 7 G; 6 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 1573 CCTTCTCCACCGCACAG 1589  
Db 18 CCTTCTCAAACGCACAG 2  
  
RESULT 4650  
AAA40867/C  
ID AAA40867 standard; DNA; 20 BP.  
XX  
AC AAA40867;  
XX  
DT 16-AUG-2000 (first entry)  
XX  
DE Murine TNFalpha antisense oligonucleotide ISIS# 14846.  
XX  
KW Antisense oligonucleotide; phosphorothioate; TNFalpha; cytokine; inhibit;  
KW tumour necrosis factor alpha; inflammatory bowel disease; diabetes;  
KW rheumatoid arthritis; infectious disease; multiple sclerosis; hepatitis;  
KW pancreatitis; atopic dermatitis; allograft rejection; autoimmune disease;  
KW inflammatory disease; ss.  
XX  
OS Synthetic.  
XX  
PN WO200020645-A1.  
XX  
PD 13-APR-2000.  
XX  
PF 05-OCT-1999; 99WO-US023205.  
XX  
PR 05-OCT-1998; 98US-00166186.  
PR 18-MAY-1999; 99US-00313932.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Baker BF, Bennett CF, Butler MM, Shanahan WJ;  
XX  
DR WPI; 2000-303808/26.  
XX  
PT Oligonucleotide for treating diseases associated with human tumor  
PT necrosis factor-alpha (TNF-alpha) such as, diabetes and rheumatoid  
PT arthritis, comprises nucleotide sequence complementary to intron of  
PT nucleic acid encoding TNF-alpha.  
XX  
PS Example 8; Page 72; 283pp; English.  
XX  
CC This sequence represents an antisense oligonucleotide sequence which  
CC targets a region of the murine tumour necrosis factor alpha (TNFalpha)  
CC nucleotide sequence. TNFalpha is an important cytokine that plays a role  
CC in host defence. It is produced mainly in macrophages and monocytes in  
CC response to infection, invasion, injury or inflammation. Overexpression  
CC of TNFalpha can result in disease states, particularly in infectious,  
CC inflammatory and autoimmune diseases. The invention relates to antisense  
CC oligonucleotides, such as that represented by the present sequence which  
CC are capable of modulating the TNFalpha gene expression. The  
CC oligonucleotides optionally have a phosphorothioate backbone, and may  
CC also optionally contain at least one 2'-O-methoxyethyl modification. The  
CC oligonucleotides are useful for modulating the expression of human  
CC TNFalpha in cells and tissues, reducing a human cell inflammatory  
CC response, reducing the blood glucose level in a human and treating a  
CC human having a disease or condition associated with TNFalpha. Examples of  
CC diseases associated with TNFalpha include diabetes, inflammatory bowel  
CC disease, multiple sclerosis, pancreatitis, rheumatoid arthritis,  
CC infectious disease, hepatitis, atopic dermatitis or allograft rejection.  
CC The antisense oligonucleotides are also useful for modulating the  
CC function of a selected nucleic acid sequence in adipose tissue  
XX  
SQ Sequence 20 BP; 1 A; 5 C; 8 G; 6 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 453 CAGGCAGCCAGCAGCAG 469  
Db 20 CAGCCAGCCAGCAGAG 4

RESULT 4651  
AAZ28947/c  
ID AAZ28947 standard; DNA; 20 BP.  
XX  
AC AAZ28947;  
XX  
DT 07-FEB-2000 (first entry)  
XX  
DE PCR primer c114 for determination of mutations in paraplegin gene.  
XX  
XW PCR primer c114; paraplegin; human; hereditary spastic paraplegia; HSP;  
KW mutation; diagnosis; treatment; neurodegenerative condition;  
KW Amyotrophic Lateral Sclerosis; ALS; ss.  
XX  
OS Synthetic.  
OS Homo sapiens.  
XX  
PN WO958556-A2.  
XX  
PD 18-NOV-1999.  
XX  
PF 06-MAY-1999; 99WO-EP003112.  
XX  
PR 08-MAY-1998; 98IT-MI001003.  
XX  
PA (TELE-) FOND TELETHON.  
XX  
PI Ballabio A, Casari G;  
XX  
DR WPI; 2000-039065/03.  
XX  
PT A novel protein associated to hereditary spastic paraplegia used for the  
PT diagnosis of neurodegenerative conditions.  
XX  
PS Disclosure; Page 14; 53pp; English.  
XX  
CC The present sequence is a PCR primer c114 used for determination of  
CC mutations in paraplegin gene in hereditary spastic paraplegia (HSP)  
CC patients. Detection of mutations helps in the diagnosis and treatment of  
CC various forms of HSP or other neurodegenerative conditions, such as  
CC Amyotrophic Lateral Sclerosis, caused due to abnormal expression of  
CC paraplegin  
XX  
SQ Sequence 20 BP; 8 A; 1 C; 10 G; 1 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 339 CCTACTTTCCCTCCCTCC 355  
Db 17 CTTACTTTCCCTCTCC 1

RESULT 4652  
AAZ59205/c  
ID AAZ59205 standard; DNA; 20 BP.  
XX  
AC AAZ59205;  
XX  
DT 20-APR-2000 (first entry)  
XX  
DE Forward PCR primer for human growth hormone gene.  
XX

Fusion protein; Bacillus; cell wall protein; promoter; cleavage site;  
TEV protease; PCR primer; ss.  
XX  
OS Homo sapiens.  
XX  
PN JP11341991-A.  
XX  
PD 14-DEC-1999.  
XX  
PF 30-MAR-1999; 99JP-00089488.  
XX  
PR 31-MAR-1998; 98JP-00087339.  
XX  
PA (ITOH-) ITOHAM FOODS INC.  
PA (UDAK/) UDAKA S.  
XX  
PI Sato S, Higashikuni N, Kudo T, Kondo M;  
XX  
DR WPI; 2000-101697/09.  
XX  
PT A DNA coding a new fused protein and preparation of a useful peptide  
PT through its expression.  
XX  
PS Example 9; Page 16; 43pp; Japanese.  
XX  
CC The invention relates to a DNA construct encoding a fusion protein  
CC comprising a Bacillus species cell wall protein fused to a cleavage  
CC peptide and a heterologous protein. The fusion construct is placed  
CC downstream of a Bacillus species promoter sequence. An example of the  
CC construct is construct MWpmp20-TEV-GH, which comprises the Bacillus  
CC brevis middle wall protein mp20 linked to the human growth hormone  
CC protein via a TEV protease cleavable linker sequence. This sequence  
CC represents the forward PCR primer for the human growth hormone (GH) gene  
XX  
SQ Sequence 20 BP; 4 A; 9 C; 0 G; 7 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1934 GTTAAGGTAATGTTGG 1950  
Db 20 GATAAGGGAATGTTGG 4

RESULT 4653  
AAZ59204/c  
ID AAZ59204 standard; DNA; 20 BP.  
XX  
AC AAZ59204;  
XX  
DT 20-APR-2000 (first entry)  
XX  
DE Second strand cDNA synthesis primer for human growth hormone gene.  
XX  
KW Fusion protein; Bacillus; cell wall protein; promoter; cleavage site;  
KW TEV protease; PCR primer; ss.  
XX  
OS Homo sapiens.  
XX  
PN JP11341991-A.  
XX  
PD 14-DEC-1999.  
XX  
PF 30-MAR-1999; 99JP-00089488.  
XX  
PR 31-MAR-1998; 98JP-00087339.  
XX  
PA (ITOH-) ITOHAM FOODS INC.  
PA (UDAK/) UDAKA S.  
XX  
PI Sato S, Higashikuni N, Kudo T, Kondo M;  
XX

DR WPI; 2000-101697/09.  
XX  
PT A DNA coding a new fused protein and preparation of a useful peptide  
PT through its expression.  
XX  
PS Example 8; Page 16; 43pp; Japanese.  
XX  
CC The invention relates to a DNA construct encoding a fusion protein  
CC comprising a Bacillus species cell wall protein fused to a cleavage  
CC peptide and a heterologous protein. The fusion construct is placed  
CC downstream of a Bacillus species promoter sequence. An example of the  
CC construct is construct MWPsp-MWPmp20-TEV-GH, which comprises the Bacillus  
CC brevis middle wall protein mp20 linked to the human growth hormone  
CC protein via a cleavable linker sequence. This sequence represents a  
CC primer for the synthesis of the second cDNA strand of the human growth  
CC hormone (GH) gene from purified mRNA  
XX  
SQ Sequence 20 BP; 4 A; 9 C; 0 G; 7 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1934 GTTAAGGTAATGCTGG 1950  
Db | | | | | | | | | | | | | | | | | | | |  
20 GATAAGGGAATGCTGG 4  
RESULT 4654  
AAA94533/c  
ID AAA94533 standard; DNA; 20 BP.  
XX  
AC AAA94533;  
XX  
DT 09-JAN-2001 (first entry)  
XX  
DE Antisense oligonucleotide #20973 targeted to human G-alpha-S1.  
XX  
KW G-alpha-S1; infection; inflammation; tumour; antisense; human;  
KW phosphorothioate; 2'-methoxyethyl; MOE; 5-methylcytidine;  
XX Gs-alpha short form; ss.  
OS Homo sapiens.  
FH Key Location/Qualifiers  
FT modified\_base 1..20  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "Optionally the internucleotide linkages are  
FT phosphorothioate"  
FT 1..5  
FT /\*tag= b  
FT /mod\_base= OTHER  
FT /note= "Optionally the nucleotides are 2'-methoxyethyl  
FT and cytidine residues are 5-methylcytidines"  
FT 16..20  
FT /\*tag= c  
FT /mod\_base= OTHER  
FT /note= "Optionally the nucleotides are 2'-methoxyethyl  
FT and cytidine residues are 5-methylcytidines"  
PN US6110664-A.  
PD 29-AUG-2000.  
XX  
PF 25-JUN-1999; 99US-00344914.  
XX  
PR 25-JUN-1999; 99US-00344914.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Cowser LM;  
XX

DR WPI; 2000-586346/55.  
XX  
PT New antisense compounds for modulating the expression of G-alpha-S1,  
PT especially useful for diagnostics, therapeutics and prophylaxis, e.g. to  
PT prevent or delay infection, inflammation or tumor formation.  
XX  
PS Claim 3; Col 40; 37pp; English.  
XX  
CC The present invention relates to antisense compounds 8-30 bases long  
CC targeted to a coding region, a stop codon, or a 3' untranslated region of  
CC human G-alpha-S1 (see AAA94451). The antisense compounds specifically  
CC hybridize with and inhibit the expression of human G-alpha-S1. The  
CC antisense compounds are useful for diagnostics, therapeutics and  
CC prophylaxis, e.g. to prevent or delay infection, inflammation or tumour  
CC formation. Particularly, the antisense oligonucleotides are useful for  
CC treating humans prone to a disease or condition associated with  
CC expression of G-alpha-S1. The present sequence an antisense  
CC oligonucleotide targeted to the 3' untranslated region of human G-alpha-  
CC S1  
XX  
SQ Sequence 20 BP; 2 A; 2 C; 1 G; 15 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1503 AGAAACACAGGAAATAA 1519  
Db | | | | | | | | | | | | | | | | | | | |  
17 AGAAACAAATGAAATAA 1  
RESULT 4655  
AAA38540  
ID AAA38540 standard; DNA; 20 BP.  
XX  
AC AAA38540;  
XX  
DT 04-SEP-2000 (first entry)  
XX  
DE Jellyfish green fluorescent protein (GFP) gene reverse PCR primer.  
XX  
KW Green fluorescent protein; GFP gene; jellyfish; PCR apparatus;  
KW hydrophilic oxide film; PCR primer; ss.  
XX Aequorea victoria.  
OS  
PN JP3041423-B1.  
XX  
PD 15-MAY-2000.  
XX  
PF 19-FEB-1999; 99JP-00040811.  
XX  
PR 19-FEB-1999; 99JP-00040811.  
XX  
PA (HOKU-) HOKURIKU SENTAN KAGAKU GIJUTSU DAIGAKUIN DAIGAKUCHO.  
XX  
DR WPI; 2000-402709/35.  
XX  
PT Polymerase chain reactor in gene analysis, performs polymerase chain  
PT reaction in each micro well of micro well IC, to form oxide film which is  
PT then removed so that inner side of micro well becomes hydrophobic.  
XX  
PS Example; Page 2; 5pp; Japanese.  
XX  
CC The invention relates to a novel apparatus for performing PCR. This  
CC apparatus consists of a micro-well integrated unit formed on surface of a  
CC semiconductor substrate. The inner wall of each micro-well is coated with  
CC a hydrophilic oxide film. PCR reactions are performed in each micro-well,  
CC and the hydrophilic film is then removed from the semiconductor substrate  
CC so that the inner wall becomes hydrophobic. The apparatus allows the  
CC simultaneous PCR amplification of small amounts of template DNA. It may  
CC be used for PCR amplification of DNA samples for a variety of purposes  
CC e.g., in the diagnosis of genetic diseases, or in forensic science.



CC Sequences AAA38539-A38540 represent PCR primers used to amplify the green  
CC fluorescent protein (GFP) gene of the jellyfish Aequorea victoria using  
CC the apparatus of the invention. Amplified product was detected using a  
CC fluorescently labelled probe (AAA38541)

XX Sequence 20 BP; 6 A; 6 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 163 CGCCATGTTGTGGA AAA 179  
Db 4 CCCATGTTGTGCA AAA 20

RESULT 4656  
AAZ29763

ID AAZ29763 standard; DNA; 20 BP.

XX AAZ29763;

DT 27-MAR-2000 (first entry)

DE Human thymidylate synthase antisense oligonucleotide 16027.

XX Antisense; oligonucleotide; thymidylate synthase; cell proliferation;  
KW hyperproliferative disease; cancer; primer; phosphorothioate linkage;  
KW thymidylate synthase-associated tumour; ss.

OS Homo sapiens.  
OS Synthetic.

XX Key Location/Qualifiers  
FH modified\_base 1..20

FT /tag= a  
FT /note= "phosphorothioate linkages"

FT modified\_base 1..6

FT /tag= b  
FT /note= "2'-methoxyethoxy nucleotides"

FT modified\_base 2

FT /tag= c  
FT /mod\_base= m5c

FT modified\_base 5

FT /tag= d  
FT /mod\_base= m5c

FT modified\_base 15..20

FT /tag= e  
FT /mod\_base= OTHER

FT modified\_base 16  
FT /note= "2'-methoxyethoxy nucleotides"

FT /tag= f  
FT /mod\_base= m5c

FT modified\_base 17

FT /tag= g  
FT /mod\_base= m5c

FT modified\_base 19

FT /tag= h  
FT /mod\_base= m5c

XX WO9963114-A1.

XX 09-DEC-1999.

XX 01-JUN-1999; 99WO-US012080.

XX 02-JUN-1998; 98US-00089195.

XX (ISIS-) ISIS PHARM INC.

XX Dean N;

XX WPI; 2000-116373/10.

XX Antisense oligonucleotides to thymidylate synthase gene for treating e.g.  
PT hyperproliferative diseases such as cancer.

XX Example 2; Page 40; 6pp; English.

XX The present sequence is the antisense oligonucleotide 16027. It is a  
CC mismatch sequence derived from oligonucleotide 13790 which is  
CC complementary to a portion of the coding region (111-130) of human  
CC thymidylate synthase gene. It is capable of modulating the expression of  
CC thymidylate synthase by hybridising to the specific target region on the  
CC gene. This oligonucleotide inhibits cell proliferation when a  
CC therapeutically or prophylactically effective amount is administered. It  
CC can be used for diagnosis and treatment of hyperproliferative diseases  
CC like cancer and to distinguish thymidylate synthase-associated tumours  
CC from tumours having other etiologies, in humans

XX Sequence 20 BP; 4 A; 9 C; 6 G; 1 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 370 CTACTCCAGTCGGCCG 386  
Db 2 CAACTCCAGGGCGCG 18

RESULT 4657  
AAZ56191/c

ID AAZ56191 standard; DNA; 20 BP.

XX AAZ56191;

XX 28-MAR-2000 (first entry)

DE Oligonucleotide A1.5 for IL-4/IL-13 receptor expression inhibition.

XX Interleukin-4; IL-4; interleukin-13; IL-13; antisense oligonucleotide;  
KW asthma; allergy; cancer; receptor expression inhibitor; immunoglobulin E;  
KW IgE; inflammation; hypereosinophilia; ss.

OS Homo sapiens.

XX WO9966037-A2.

XX 23-DEC-1999.

XX 17-JUN-1999; 99WO-CA000572.

XX 17-JUN-1998; 98CA-02235420.

XX (REEX-) RECH EXPERTISES & DEV MEDICAUX PARENZ IN.

XX Renzi P;

XX WPI; 2000-097743/08.

XX Antisense oligonucleotides directed to CCR3, interleukin or granulocyte  
PT macrophage colony stimulating factor receptors, used for treating or  
PT preventing asthma, allergies, hypereosinophilia, inflammation or cancer.

XX Claim 5; Page 19; 72pp; English.

XX This is an antisense oligonucleotide directed against the common subunits  
CC of the interleukin-4 (IL-4) receptor and the interleukin-13 (IL-13)  
CC receptor. The antisense oligonucleotide inhibits IL-13 and IL-4 receptor  
CC expression. IL-4 and IL-13 are involved in immunoglobulin E (IgE)  
CC production, the development and persistence of asthma and atopy. The  
CC invention relates to antisense oligonucleotides directed against a  
CC nucleic acid sequence encoding either a chemokine receptor (CCR3), a  
CC common subunit of IL-4 and IL-13 receptors, or a common subunit of  
CC interleukin-3 (IL-3), interleukin-5 (IL-5) and granulocyte macrophage

CC colony stimulating factor (GM-CSF) receptors. The antisense  
CC oligonucleotides can be used in the treatment or prevention of asthma,  
CC allergy, hypereosinophilia, general inflammation or cancer  
XX Sequence 20 BP; 0 A; 16 C; 4 G; 0 T; 0 U; 0 Other;  
SQ Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 51 GCGCGGGGGCGGGC 67  
Db 18 GGGCGGGGGCGGGGC 2  
RESULT 4658  
ABK12263  
ID ABK12263 standard; DNA; 20 BP.  
XX AC ABK12263;  
XX DT 05-JUN-2002 (first entry)  
XX DE Capra hircus aegagrus growth hormone gene associated oligonucleotide #5.  
XX XX Growth hormone; Capra hircus aegagrus; ds.  
XX OS Unidentified.  
XX PN KR99042572-A.  
XX PD 15-JUN-1999.  
XX PF 27-NOV-1997; 97KR-00063428.  
XX PR 27-NOV-1997; 97KR-00063428.  
XX PA (LEE H.) LEE H H.  
XX PI Chung SW, Han YM, Lee CS, Lee HH, Chang HY, Baek MG, Lee GG;  
XX WPI; 2000-419386/36.  
XX PT Capra hircus aegagrus growth hormone gene.  
XX PS Example 3; Page 6; 16pp; Korean.  
XX CC The present invention relates to a new Capra hircus aegagrus growth  
CC hormone gene. The present nucleic acid sequence represents an  
CC oligonucleotide sequence used in the methods of the invention for  
CC analysis of the Capra hircus aegagrus growth hormone gene of the  
CC invention  
XX SQ Sequence 20 BP; 5 A; 5 C; 4 G; 6 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 837 TCTGCTCAGTCCCTGGA 853  
Db 4 TGTCTCAGTCCCTGGA 20  
RESULT 4659  
AAC62998  
ID AAC62998 standard; DNA; 20 BP.  
XX AC AAC62998;  
XX DT 06-FEB-2001 (first entry)  
XX DE JNK antisense oligonucleotide ISIS #21912.

XX Antisense; gene therapy; JNK2 protein; apoptosis; cancer;  
KW cellular hyperproliferation; Alzheimer's; Parkinson's disease;  
KW amyotrophic lateral sclerosis; retinitis; pigmentosa; epilepsy;  
KW myocardial infarction; stroke; obstructive jaundice; polycystic kidney;  
KW diabetes; Jun N-terminal kinase; ss.  
XX Homo sapiens.  
PN WO200059549-A1.  
PD 12-OCT-2000.  
XX PF 04-APR-2000; 2000WO-US008880.  
XX PR 07-APR-1999; 99US-00287796.  
XX PA (ISIS-) ISIS PHARM INC.  
XX PI Mckay R, Dean NM, Monia BP, Nero PS, Gaarde WA;  
XX WPI; 2000-638427/61.  
XX DR Novel methods for reducing apoptosis comprising contacting cells with  
XX PT antisense oligonucleotides, useful for treating apoptotic disorders, e.g.  
XX PT cancer.  
XX PS Example 8; Page 156; 160pp; English.  
XX CC The present invention relates to antisense oligonucleotides (AAC62844-  
CC C63000, AAA96093-A96099 and AAA07993) that hybridise specifically to a  
CC nucleotide encoding a Jun N-terminal kinase (JNK2) protein, resulting in  
CC decrease of JNK2 expression and leading to induction of apoptosis. The  
CC present sequence is one such antisense oligonucleotide. The  
CC oligonucleotides of the present invention are useful for treating  
CC diseases or conditions with reduced apoptosis, e.g. cancer and cellular  
CC hyperproliferation. The oligonucleotides may also be used to increase the  
CC stimulation of apoptotic proteins, e.g. for treating Alzheimer's or  
CC Parkinson's disease, amyotrophic lateral sclerosis, retinitis,  
CC pigmentosa, epilepsy, myocardial infarction, stroke, obstructive  
CC jaundice, polycystic kidney and diabetes. The present sequence may have a  
CC phosphorothioate backbone  
XX SQ Sequence 20 BP; 7 A; 4 C; 8 G; 1 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1457 GGAGACCAAGTCCAGC 1473  
Db 3 GGAGACCAAGTCCAGC 19  
RESULT 4660  
AAC64800/c  
ID AAC64800 standard; DNA; 20 BP.  
XX AC AAC64800;  
XX DT 01-MAR-2001 (first entry)  
XX DE Human plakophilin-3 PCR primer SEQ ID NO:15.  
XX KW Plakophilin-3; PKP3; catenin-like protein; characterisation; diagnosis;  
KW desmosome; epithelial cell; skin disease; dermatological; gene therapy;  
KW vaccine; PCR primer; ss.  
XX OS Homo sapiens.  
XX PN WO200066619-A2.  
XX PD 09-NOV-2000.

XX 28-APR-2000; 2000WO-EP004389.  
XX 30-APR-1999; 99EP-00870093.  
XX (VLAA-) VLAAMS INTERUNIVERSITAIR INST BIOTECHNOG.  
XX Van Roy F, Bonne S;  
XX WPI; 2000-687529/67.  
XX Nucleic acids encoding Plakophilin-3 polypeptides, useful for treating  
XX skin diseases and disorders of epithelial tissue associated with  
XX inappropriate Plakophilin-3 expression and activity.  
XX Example 1; Page 19; 132pp; English.  
XX The present invention describes an isolated or recombinant nucleic acid  
XX molecule (I) encoding a Plakophilin-3 (PKP3), from humans, mice and  
XX xenopus laevis. (I) has dermatological activity, and can be used in gene  
XX therapy and for vaccines. (I) and the protein it encodes may be used in  
XX the prevention, treatment and diagnosis of diseases associated with  
XX inappropriate PKP3 expression, such as skin diseases and disorders  
XX affecting epithelial tissue. For example, (I) (and vectors containing  
XX (I)) and the PKP3 polypeptide may be used to treat disorders associated  
XX with decreased PKP3 expression by rectifying mutations or deletions in a  
XX patient's genome that affect the activity of PKP3 by expressing inactive  
XX proteins or to supplement the patients own production of PKP3  
XX polypeptides. Additionally, (I) may be used to produce PKP3, according to  
XX standard recombinant DNA methodology, by inserting the nucleic acids into  
XX a host cell and culturing the cell to express the protein. (I) and  
XX complementary sequences may also be used as DNA probes in diagnostic  
XX assays to detect and quantitate the presence of similar nucleic acid  
XX sequences in samples, and hence which patients may be in need of  
XX restorative therapy. The PKP3 polypeptides may be used as antigens in the  
XX production of antibodies against PKP3 and in assays to identify  
XX modulators (agonists and antagonists) of PKP3 expression and activity.  
XX The anti-PKP3 antibodies and PKP3 antagonists may also be used to down  
XX regulate PKP3 expression and activity. The anti-PKP3 antibodies may also  
XX be used as diagnostic agents for detecting the presence of PKP3  
XX polypeptides in samples (e.g. by enzyme linked immunosorbant assay  
XX (ELISA)). PKP3 is a catenin-like protein, which is present in desmosomes  
XX and nuclei of epithelial cells. The present sequence represents a PCR  
XX primer for human PKP3, which is used in an example from the present  
XX invention  
XX Sequence 20 BP; 4 A; 3 C; 9 G; 4 T; 0 U; 0 Other;  
XX Query Match 0.5%; Score 13.8; DB 1; Length 20;  
XX Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
XX Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 591 CCTACCGCGCTCTCGAC 607  
DB 19 CCTACCGCGCTCTCGAC 3  
RESULT 4661  
AAA74057  
ID AAA74057 standard; DNA; 20 BP.  
XX AAA74057;  
XX 29-NOV-2000 (first entry)  
XX Forward PCR primer for loblolly pine locus RIPPT298.  
XX PCR primer; loblolly pine; Simple Sequence Repeat; SSR;  
KW microsatellite DNA repeat; genetic marker; mapping; inheritance study;  
KW population genetics study; plant breeding programme; ss.  
XX Pinus taeda.  
OS  
XX

PN WO200042210-A2.  
XX 20-JUL-2000.  
XX 06-JAN-2000; 2000WO-US0000325.  
XX 15-JAN-1999; 99US-00232884.  
XX 19-JAN-1999; 99US-00232785.  
XX (INTO ) INT PAPER CO.  
XX (ECHO/) ECHO C S.  
XX (NELS/) NELSON C D.  
XX (USDA ) US SEC OF AGRIC.  
XX ECHO CS, Nelson CD;  
XX WPI; 2000-482836/42.  
XX Polynucleotide having simple sequence repeat useful as markers in plants  
XX for genetic characterization e.g. genetic mapping study, an inheritance  
XX study of a commercially important trait in a plant breeding program.  
XX Claim 6; Page 22; 57pp; English.  
XX The present invention relates to loblolly pine polynucleotides with one  
XX or more Simple Sequence Repeats (SSRs) (see AAA74205-A74322). SSRs are  
XX also known as microsatellite DNA repeats. The SSRs are useful as genetic  
XX markers for genetic mapping, population genetics studies and inheritance  
XX studies in various plant breeding programmes. The present sequence is a  
XX PCR primer used for detecting the presence of a SSR locus in a pine  
XX genomic DNA sample  
XX Sequence 20 BP; 3 A; 8 C; 1 G; 8 T; 0 U; 0 Other;  
XX Query Match 0.5%; Score 13.8; DB 1; Length 20;  
XX Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
XX Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 754 TCCCATTTTCCATGACCA 770  
DB 4 TCCCATTTTCCATGACCA 20  
RESULT 4662  
AAF31794/C  
ID AAF31794 standard; DNA; 20 BP.  
XX AAF31794;  
XX 10-APR-2001 (first entry)  
XX Human RANK antisense oligonucleotide, SEQ ID NO: 52.  
XX Human; cytostatic; antiinflammatory; antisense oligonucleotide; cancer;  
KW receptor activator of NF-kappaB; RANK; infection; inflammation; ss.  
XX Homo sapiens.  
XX US6171860-B1.  
XX 09-JAN-2001.  
XX 05-NOV-1999; 99US-00435296.  
XX 05-NOV-1999; 99US-00435296.  
XX (ISIS-) ISIS PHARM INC.  
XX Baker BF, Cowser LM;  
XX WPI; 2001-136876/14.  
XX Novel antisense compounds capable of modulating expression of human  
PT

PT receptor activator of NF-kappaB useful for diagnosis, prophylaxis and  
PT treatment of diseases associated with expression of RANK.  
XX  
PS Claim 14; Col 43; 40pp; English.  
XX  
CC The present sequence is one of a number of antisense compounds of 8 to 30  
CC nucleobases in length that have been designed to target a 5'untranslated  
CC region, start codon, coding region or 3'untranslated region of the human  
CC receptor activator of NF-kappaB (RANK). The antisense compounds  
CC specifically hybridise with and inhibit the expression of RANK. The  
CC antisense oligonucleotides are useful for inhibiting the expression of  
CC human RANK in human cells or tissues. They can be utilised for  
CC diagnostics, therapeutics for the treatment of diseases associated with  
CC the expression of RANK, prophylaxis e.g. to prevent or delay infection,  
CC inflammation or tumour formation, and as research reagent. The antisense  
CC compounds are safely and effectively administered to humans  
XX  
SQ Sequence 20 BP; 0 A; 8 C; 7 G; 5 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1457 GGAGACCAGAGTCCAGC 1473  
Db 20 GGAGGCCAGAGACCAGC 4  
RESULT 4663  
AAH75301/C  
ID AAH75301 standard; DNA; 20 BP.  
XX  
AC AAH75301;  
XX  
DT 02-OCT-2001 (first entry)  
XX  
DE Mouse inducible NOS antisense oligonucleotide SEQ ID NO 145.  
XX  
KW Antisense oligonucleotide; inducible nitric oxide synthase; NOS;  
KW modulate expression; immunomodulator; antidiabetic; cardiovascular;  
KW cardiant; neuroprotective; vasotropic; ischaemia; reperfusion injury;  
KW 2'-O-methoxyethyl; phosphorothioate; mouse; ss.  
XX  
OS Mus sp.  
XX  
FH Key Location/Qualifiers  
FT modified\_base 1..20  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "phosphorothioate backbone, 5' and 3' five  
FT nucleotide 2'-MOE (2'-O-methoxyethyl) wings, all cytidine  
FT residues are 5-methylcytidines and a deoxy gap"  
XX  
PN WO200152902-A1.  
XX  
PD 26-JUL-2001.  
XX  
PF 15-JAN-2001; 2001WO-US001381.  
XX  
PR 24-JAN-2000; 2000US-00490208.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Bennett CF, Dean NM, Cowser LM;  
XX  
DR WPI; 2001-465340/50.  
XX  
PT New antisense oligonucleotides for modulating the expression of inducible  
PT nitric oxide synthase in cells or tissues, particularly useful for  
PT treating e.g. immunological, cardiovascular or neurological disorders, or  
PT ischemia.  
XX  
PS Example 17; Page 86; 144pp; English.

XX The invention relates to antisense compounds, especially  
CC oligonucleotides, which are targeted to a nucleic acid encoding inducible  
CC nitric oxide synthase and which specifically hybridise to and modulate  
CC expression of inducible nitric oxide synthase. The antisense compounds  
CC have immunomodulator, antidiabetic, cardiovascular, cardiant,  
CC neuroprotective, disorder and vasotropic activity. The antisense  
CC oligonucleotides are useful for inhibiting the expression of inducible  
CC nitric oxide synthase in cells or tissues. In particular, the antisense  
CC oligonucleotides are useful for treating diseases or disorders associated  
CC with inducible nitric oxide synthase, e.g. diabetes, immunological  
CC disorder, cardiovascular disorder, neurological disorder or  
CC ischaemia/reperfusion injury. The antisense oligonucleotides are also  
CC useful for research and diagnostics. The present sequence is that of an  
CC antisense 2'-O-methoxyethyl gapmer oligonucleotide with a  
CC phosphorothioate backbone, a central "gap" region of ten nucleotides  
CC flanked by five nucleotide 2'-MOE (2'-methoxyethyl) wings and 5-  
CC methylcytidine residues throughout the oligonucleotide. The antisense  
CC oligonucleotide is targeted to mouse inducible nitric oxide synthase (NOS)  
CC mRNA (AAH47974)  
XX  
SQ Sequence 20 BP; 4 A; 1 C; 6 G; 9 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1431 TCATAGACAAATCCTAC 1447  
Db 20 TCAAAGTCAAATCCTAC 4  
RESULT 4664  
AAK95000/C  
ID AAK95000 standard; DNA; 20 BP.  
XX  
AC AAK95000;  
XX  
DT 06-NOV-2001 (first entry)  
XX  
DE Human cDNA clone-specific primer, SEQ ID NO: 4245.  
XX  
KW Human; full length cDNA; cDNA synthesis; oligo-capping; PCR primer; ss.  
XX  
OS Homo sapiens.  
XX  
PN EP1130094-A2.  
XX  
PD 05-SEP-2001.  
XX  
PF 07-JUL-2000; 2000EP-00114089.  
XX  
PR 08-JUL-1999; 99JP-00194486.  
PR 11-JAN-2000; 2000JP-00118774.  
PR 02-MAY-2000; 2000JP-00183765.  
XX  
PA (HELI-) HELIX RES INST.  
XX  
PI Ota T, Nishikawa T, Isogai T, Hayashi K, Ishii S, Kawai Y;  
PI Wakamatsu A, Sugiyama T, Nagai K, Kojima S, Otsuki T, Koga H;  
XX  
DR WPI; 2001-524255/58.  
XX  
PT 830 Primers useful for synthesizing full length cDNA clones and their use  
PT in genetic manipulation.  
XX  
PS Example 18; Page 128; 1380pp + Sequence Listing; English.  
XX  
CC The invention relates to primers for synthesising full length cDNA  
CC clones. 830 cDNA molecules encoding a human protein have been isolated  
CC and nucleotide sequences of 5'- and 3'-ends of the cDNA molecules have  
CC been determined. Primers for synthesising the full length cDNA are useful  
CC for clarifying the function of the protein encoded by the cDNA. The full



CC length clones were obtained by construction of full length enriched cDNA  
CC libraries that were synthesised by the oligo-capping method. The primers  
CC enable the production of the full length cDNA easily without any special  
CC methods. The present sequence is a primer used to amplify a human cDNA  
CC clone provided in the invention  
XX  
SQ Sequence 20 BP; 8 A; 6 C; 5 G; 1 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 1647 AGCCTTCACTGGTTCTG 1663  
Db 20 AGCCTTCTCTGTTCTG 4  
  
RESULT 4665  
AAF73065  
ID AAF73065 standard; DNA; 20 BP.  
XX  
AC AAF73065;  
XX  
DT 24-APR-2001 (first entry)  
XX  
DE Human daxe inhibitory antisense phosphorothioate oligonucleotide SEQ.166.  
XX  
KW Antisense oligonucleotide; daxe; inhibition; phosphorothioate;  
KW Fas binding protein; CENP-C binding protein; dap6; EAP; cytostatic;  
KW antiinflammatory; death associated protein 6; Ets-1 associated protein;  
KW infection; inflammation; tumour formation; ss.  
XX  
OS Homo sapiens.  
XX  
PN US6180353-B1.  
XX  
PD 30-JAN-2001.  
XX  
PF 24-JAN-2000; 2000US-00490692.  
XX  
PR 24-JAN-2000; 2000US-00490692.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Dean NM, Cowser LM;  
XX  
XX WPI; 2001-217744/22.  
DR  
XX Novel antisense compounds capable of modulating expression of daxe useful  
PT for diagnosis, prophylaxis and treatment of diseases associated with  
PT expression of daxe.  
XX  
PS Claim 1; Col 49; 59pp; English.  
XX  
CC The present invention describes an antisense compound (I) up to 30  
CC nucleobases in length, where (I) inhibits expression of daxe (also known  
CC as Fas binding protein, CENP-C binding protein, dap6 for death associated  
CC protein 6 and EAP for Ets-1 associated protein). (I) has cytostatic and  
CC antiinflammatory activity, and can be used in antisense therapy and as a  
CC modulator of daxe. (I) is useful for inhibiting the expression of daxe in  
CC cells or tissues in vitro. (I) can be utilised for diagnostics,  
CC therapeutics for the treatment of diseases associated with the expression  
CC of daxe, prophylaxis e.g. to prevent or delay infection, inflammation or  
CC tumour formation and as research reagent. The present sequence represents  
CC an inhibitory human daxe antisense phosphorothioate oligonucleotide which  
CC is used in the exemplification of the present invention  
XX  
SQ Sequence 20 BP; 6 A; 6 C; 3 G; 5 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2032 AGGCAAGGTTCTATCT 2048  
Db 1 AGGCAAGGTTCCATCT 17  
  
RESULT 4666  
AAS45802/c  
ID AAS45802 standard; DNA; 20 BP.  
XX  
AC AAS45802;  
XX  
DT 18-DEC-2001 (first entry)  
XX  
DE Mouse PARP-2 antisense inhibitor ISIS #110268.  
XX  
KW Mouse; ss; PARP; Poly (ADP-ribose) polymerase; antisense oligonucleotide;  
KW cytostatic; neurotropic; neuroprotective; antiinflammatory; antidiabetic;  
KW immunosuppressant; hyperproliferative disorder; cancer; cellular injury;  
KW oxidative stress; neurological disorder; parkinsonism; apoptosis;  
KW meningitis-associated intracranial complication; ischaemia; probe;  
KW inflammatory disorder; autoimmune disorder; arthritis; diabetes.  
XX  
OS Mus musculus.  
XX  
FH Key Location/Qualifiers  
FT modified\_base 1..20  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "Phosphorothioate backbone"  
FT modified\_base 1..20  
FT /\*tag= b  
FT /mod\_base= OTHER  
FT /note= "All cytidine residues are 5-methyl cytidine"  
FT modified\_base 1..5  
FT /\*tag= c  
FT /mod\_base= OTHER  
FT /note= "2'-methoxyethyl nucleotides"  
FT modified\_base 16..20  
FT /\*tag= d  
FT /mod\_base= OTHER  
FT /note= "2'-methoxyethyl nucleotides"  
XX  
PN WO200164955-A1.  
XX  
PD 07-SEP-2001.  
XX  
PF 01-MAR-2001; 2001WO-US0006572.  
XX  
PR 02-MAR-2000; 2000US-00517467.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Popoff I, Cowser LM;  
XX  
XX WPI; 2001-602570/68.  
DR  
XX Antisense compound useful for treating hyperproliferative, neurological,  
PT inflammatory and autoimmune disorders and diabetes inhibits human PARP.  
XX  
PS Example 17; Page 89; 168pp; English.  
XX  
CC The invention relates to antisense oligonucleotides targeted to human  
CC PARP nucleic acid and inhibiting expression of human PARP. PARP (Poly  
CC (ADP-ribose) polymerase plays an important role in chromatin  
CC decondensation, DNA replication, DNA repair, gene expression, malignant  
CC transformation, cellular differentiation and apoptosis. The antisense  
CC oligonucleotide inhibitors are useful for inhibiting the expression of  
CC PARP in human cells or tissues. They are also useful for treating a human  
CC with a disease associated with PARP especially hyperproliferative  
CC disorders (e.g. cancer), cellular injury resulting from oxidative stress,  
CC neurological (e.g. parkinsonism, meningitis-associated intracranial  
CC complications and ischaemia), inflammatory and autoimmune disorders (e.g  
CC arthritis) and diabetes. The present sequence is an antisense

CC oligonucleotide of the invention  
XX  
SQ Sequence 20 BP; 3 A; 4 C; 8 G; 5 T; 0 U; 0 Other; 0;  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 22 TCCAGTGACCCGACAG 38  
Db 17 TCCAGTAATCCGACAG 1  
RESULT 4667  
AAC92903  
ID AAC92903 standard; DNA; 20 BP.  
XX  
AC AAC92903;  
XX  
DT 27-MAR-2001 (first entry)  
XX  
DE Human PI3 kinase p55 gamma antisense oligonucleotide, SEQ ID NO:86.  
XX  
KW Human phosphatidylinositol 3-kinase p55 gamma regulatory subunit;  
KW PI3 kinase p55 gamma; hp55-gamma; p55-gamma; PIK3R3; p55PIK;  
KW signal transduction; downstream effector; receptor tyrosine kinase;  
KW insulin receptor; IR; insulin-like growth factor receptor; IGFR;  
KW cell growth; differentiation; apoptosis; developmental regulation;  
KW alternative splicing; tumour formation; cancer; inflammation; infection;  
KW expression inhibition; phosphorothioate; antisense oligonucleotide; ss.  
XX  
OS Homo sapiens.  
XX  
PN US6165790-A.  
XX  
PD 26-DEC-2000.  
XX  
PF 03-NOV-1999; 99US-00433694.  
XX  
PR 03-NOV-1999; 99US-00433694.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Borchers AH, Cowsert LM, Ward DT;  
XX  
DR WPI; 2001-101697/11.  
XX  
PT Novel antisense compound targeted to human PI3 kinase p55 gamma  
PT specifically hybridizes with and inhibits the expression of human PI3  
PT kinase p55 gamma, useful for modulating the expression of PI3 kinase p55  
PT gamma in cells.  
XX  
PS Claim 14; Col 43-44; 39pp; English.  
XX  
CC Sequences AAC92827-C92906 represent phosphorothioate antisense  
CC oligonucleotides targeted to the phosphatidylinositol 3-kinase p55 gamma  
CC regulatory subunit (PI3 kinase p55 gamma) gene, which inhibit its  
CC expression. The antisense oligonucleotides were designed to target  
CC different regions of human PI3 kinase p55 mRNA species, and were analysed  
CC for their effect on PI3 kinase p55 mRNA levels by quantitative real-time  
CC PCR. PI3 kinase p55 gamma (also known as hp55-gamma, p55-gamma, PIK3R3  
CC and p55PIK) is one of several PI3 kinase regulatory subunits that may  
CC associate with the PI3 kinase catalytic subunit to form a heterodimeric  
CC PI3 kinase holoenzyme. PI3 kinases act as downstream effectors of  
CC receptor tyrosine kinases such as growth factor and hormone receptors and  
CC oncogene products, and are found in association with the cytoplasmic  
CC domains of such receptors. PI3 kinase p55 gamma is able to interact with  
CC both the insulin receptor (IR) and the insulin-like growth factor  
CC receptor (IGFR), which play important roles in growth, differentiation  
CC and apoptosis. PI3 kinase p55 gamma is thought to be developmentally  
CC regulated, as four distinct mRNA species are found in adult tissues,  
CC while only the larger mRNA is expressed in foetal tissues. The  
CC oligonucleotides of the invention are useful for diagnosis, prevention

CC and treatment of conditions associated with PI3 kinase p55 expression,  
CC such as tumour formation, inflammation and certain infections, and allow  
CC expression level modulation of the alternatively spliced forms of PI3  
CC kinase p55  
XX  
SQ Sequence 20 BP; 6 A; 4 C; 7 G; 3 T; 0 U; 0 Other; 0;  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 2293 TGAAGAGGGTAGGCACG 2309  
Db 1 TGAACAGGGTAGGCAAG 17  
RESULT 4668  
AAC92905  
ID AAC92905 standard; DNA; 20 BP.  
XX  
AC AAC92905;  
XX  
DT 27-MAR-2001 (first entry)  
XX  
DE Human PI3 kinase p55 gamma antisense oligonucleotide, SEQ ID NO:88.  
XX  
KW Human phosphatidylinositol 3-kinase p55 gamma regulatory subunit;  
KW PI3 kinase p55 gamma; hp55-gamma; p55-gamma; PIK3R3; p55PIK;  
KW signal transduction; downstream effector; receptor tyrosine kinase;  
KW insulin receptor; IR; insulin-like growth factor receptor; IGFR;  
KW cell growth; differentiation; apoptosis; developmental regulation;  
KW alternative splicing; tumour formation; cancer; inflammation; infection;  
KW expression inhibition; phosphorothioate; antisense oligonucleotide; ss.  
XX  
OS Homo sapiens.  
XX  
PN US6165790-A.  
XX  
PD 26-DEC-2000.  
XX  
PF 03-NOV-1999; 99US-00433694.  
XX  
PR 03-NOV-1999; 99US-00433694.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Borchers AH, Cowsert LM, Ward DT;  
XX  
DR WPI; 2001-101697/11.  
XX  
PT Novel antisense compound targeted to human PI3 kinase p55 gamma  
PT specifically hybridizes with and inhibits the expression of human PI3  
PT kinase p55 gamma, useful for modulating the expression of PI3 kinase p55  
PT gamma in cells.  
XX  
PS Claim 14; Col 43-44; 39pp; English.  
XX  
CC Sequences AAC92827-C92906 represent phosphorothioate antisense  
CC oligonucleotides targeted to the phosphatidylinositol 3-kinase p55 gamma  
CC regulatory subunit (PI3 kinase p55 gamma) gene, which inhibit its  
CC expression. The antisense oligonucleotides were designed to target  
CC different regions of human PI3 kinase p55 mRNA species, and were analysed  
CC for their effect on PI3 kinase p55 mRNA levels by quantitative real-time  
CC PCR. PI3 kinase p55 gamma (also known as hp55-gamma, p55-gamma, PIK3R3  
CC and p55PIK) is one of several PI3 kinase regulatory subunits that may  
CC associate with the PI3 kinase catalytic subunit to form a heterodimeric  
CC PI3 kinase holoenzyme. PI3 kinases act as downstream effectors of  
CC receptor tyrosine kinases such as growth factor and hormone receptors and  
CC oncogene products, and are found in association with the cytoplasmic  
CC domains of such receptors. PI3 kinase p55 gamma is able to interact with  
CC both the insulin receptor (IR) and the insulin-like growth factor  
CC receptor (IGFR), which play important roles in growth, differentiation  
CC and apoptosis. PI3 kinase p55 gamma is thought to be developmentally

CC regulated, as four distinct mRNA species are found in adult tissues,  
CC while only the larger mRNA is expressed in foetal tissues. The  
CC oligonucleotides of the invention are useful for diagnosis, prevention,  
CC and treatment of conditions associated with PI3 kinase p55 expression,  
CC such as tumour formation, inflammation and certain infections, and allow  
CC expression level modulation of the alternatively spliced forms of PI3  
CC kinase p55  
XX  
SQ Sequence 20 BP; 5 A; 5 C; 7 G; 3 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 1370 AGCAGGCCATCTGTGC 1386  
DB 4 AGCGAGGGCATCTGTGC 20  
  
RESULT 4669  
AAH77763/C  
ID AAH77763 standard; DNA; 20 BP.  
XX  
AC AAH77763;  
XX  
DT 13-NOV-2001 (first entry)  
XX  
DE PCR primer for human thrombospondin 1-like protein cDNA.  
XX  
KW Thrombospondin 1-like protein; TSPI-like protein; vesicle transport;  
KW brain tumour; PCR primer; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO200109321-A1.  
XX  
PD 08-FEB-2001.  
XX  
PF 28-JUL-2000; 2000WO-JP005068.  
XX  
PR 29-JUL-1999; 99JP-00248036.  
PR 27-AUG-1999; 99JP-00300253.  
PR 18-OCT-1999; 99US-0159590P.  
PR 11-JAN-2000; 2000JP-00118776.  
PR 17-FEB-2000; 2000US-0183322P.  
PR 02-MAY-2000; 2000JP-00183767.  
XX  
PA (HELI-) HELIX RES INST.  
XX  
PI Ota T, Isogai T, Nishikawa T, Hayashi K, Saito K, Yamamoto J;  
PI Ishii S, Sugiyama T, Wakamatsu A, Nagai K, Otsuki T, Murakami K;  
PI Yano K, Kanzaki K, Inoue Y;  
XX  
DR WPI; 2001-541222/60.  
XX  
PT Gene encoding thrombospondin-like protein, and the protein and antibodies  
PT to it, useful for diagnosis and treatment of brain tumors.  
XX  
PS Example 9; Page 28; 105pp; Japanese.  
XX  
CC PCR primers AAH77763-65 were used to amplify cDNA encoding a  
CC thrombospondin 1-like (TSPI-like) protein. The cDNA sequence encoding  
CC human TSPI-like protein was isolated from a human 10 week-aged foetal  
CC tissue cDNA library. The TSPI-like protein may be involved in  
CC intracellular vesicle transport. Secretion of the TSPI-like protein is  
CC reduced in brain tumours. It can be used in the screening of target  
CC compounds, and is useful for diagnosis, prediction and treatment of brain  
CC tumour  
XX  
SQ Sequence 20 BP; 5 A; 7 C; 3 G; 5 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 1210 GAAGAACATGCTATTGG 1226  
DB 17 GAAGCACATGCGATTGG 1  
  
RESULT 4670  
AAH21418  
ID AAH21418 standard; DNA; 20 BP.  
XX  
AC AAH21418;  
XX  
DT 18-SEP-2001 (first entry)  
XX  
DE C. lanceolata KASIII primer Clprae-5.  
XX  
KW KASIII; beta-ketoacyl-ACP (acyl carrier protein)-synthase III; biofuel;  
KW feedback inhibition; medium-chain fatty acid; acyl-ACP; plant;  
KW oilseed crop; microorganism; long chain fatty acid; nutrition; cosmetic;  
KW cleaning composition; detergent; dye additive; lubricant; processing aid;  
KW emulsifier; hydraulic fluid; carrier; pharmaceutical; primer; ss.  
XX  
OS Cuphea lanceolata.  
XX  
PN WO200151647-A2.  
XX  
PD 19-JUL-2001.  
XX  
PF 11-JAN-2001; 2001WO-EP000289.  
XX  
PR 12-JAN-2000; 2000DE-01000978.  
XX  
PA (GVSE-) GVS GES ERWERB & VERW VON SCHUTZRE.  
XX  
PI Spener F, Abbadi A, Brummel M;  
XX  
DR WPI; 2001-442152/47.  
XX  
PT New DNA encoding plant beta-ketoacyl-acyl-carrier protein synthase III,  
PT useful for making transgenic plants and microorganisms with increased  
PT production of short- or medium-chain fatty acids.  
XX  
PS Example 5; Page 40; 65pp; German.  
XX  
CC This invention describes a novel DNA sequence (I) that encodes a protein  
CC (II) with the enzymatic activity of a beta-ketoacyl-ACP (acyl carrier  
CC protein)-synthase III (KAS III) from Brassica napus or Cuphea lanceolata.  
CC KAS III has different binding sites for inhibitory acyl-ACP and for  
CC substrate ACPs, so mutating the former abolishes its regulatory function  
CC (feedback inhibition by medium-chain fatty acids (FA)), resulting in  
CC uninhibited synthesis of acyl-ACPs that inhibit the enzymes involved in  
CC synthesis of medium- and long-chain FA. (I) are used to produce plants  
CC (particularly oilseed crops) and microorganisms with increased contents  
CC of fatty acids of short- or medium-chain length (4-10 C). These FA, and  
CC oils containing them, are used in nutrition; cosmetics; cleaning  
CC compositions; also as detergents, dye additives, lubricants, processing  
CC aids, emulsifiers, hydraulic fluids, as carriers in pharmaceutical and  
CC cosmetic compositions, also possibly as biofuels. This sequence  
CC represents a primer used in the preparation of the KASIII proteins  
CC described in the method of the invention  
XX  
SQ Sequence 20 BP; 3 A; 2 C; 8 G; 7 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 137 TGGCGACTGTTTGGG 153  
DB 2 TGGCGAATGCTTTGGG 18







RESULT 4673  
AAF99014  
ID AAF99014 standard; DNA; 20 BP.  
XX  
AC AAF99014;  
XX  
DT 12-JUN-2001 (first entry)  
XX  
XX Immunostimulatory nucleic acid #130.  
DE  
DE Vaccine; cytostatic; virucidal; bactericidal; fungicidal; anti-parasitic;  
KW immunostimulatory; tumour; viral infection; bacterial infection;  
KW fungal infection; parasitic infection; cancer; asthma;  
KW infectious disease; allergy; immune deficiency; phosphorothioate; ss.  
XX  
OS Synthetic.  
XX  
XX WO200122972-A2.  
XX  
XX 05-APR-2001.  
XX  
XX 25-SEP-2000; 2000WO-US026383.  
XX  
XX 25-SEP-1999; 99US-0156113P.  
XX 27-SEP-1999; 99US-0156135P.  
XX 23-AUG-2000; 2000US-0227436P.  
XX  
PA (IOWA ) UNIV IOWA RES FOUND.  
PA (COLE-) COLEY PHARM GMBH.  
XX  
XX Krieg AM, Schetter C, Vollmer J;  
PI WPI; 2001-273485/28.  
XX  
XX Vaccinating against tumors, infectious diseases, allergies and asthma  
PT using immunostimulatory Py-rich and TG nucleic acids.  
PT  
XX Claim 101; Page 41; 338pp; English.  
XX  
XX The present invention relates to a method for stimulating an immune  
CC response. The method comprises administering an immunostimulatory nucleic  
CC acid to a non-rodent subject in sufficient quantity to stimulate an  
CC immune response. The present sequence is one such immunostimulatory  
CC nucleic acid. The immunostimulatory nucleic acids can be pyrimidine rich  
CC (py-rich) or thymidine (T) rich. The method is used to vaccinate subjects  
CC against tumour antigens, viral antigens (e.g. herpesviridae, retroviridae  
CC and/or orthomyxoviridae), bacterial antigens (e.g. toxoplasma,  
CC haemophilus, campylobacter, clostridium, Escherichia coli and/or  
CC staphylococcus), fungal antigens and/or parasitic antigens. The method is  
CC also useful for preventing cancer, asthma, infectious disease, allergy or  
CC immune deficiency. The present sequence can also be used to redirect a  
CC Th2 to a Th1 immune response and to activate immune cells. Note: the  
CC present sequence may have a phosphorothioate backbone  
XX  
SQ Sequence 20 BP; 0 A; 10 C; 10 G; 0 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 520 CGGGCGCGCGCGCGGCC 536  
Db 2 CGGCGCGCGCGCGCGGCC 18  
RESULT 4674  
AAF99014/c  
ID AAF99014 standard; DNA; 20 BP.  
XX  
AC AAF99014;  
XX  
DT 12-JUN-2001 (first entry)  
XX

DE Immunostimulatory nucleic acid #130.  
XX  
KW Vaccine; cytostatic; virucidal; bactericidal; fungicidal; anti-parasitic;  
KW immunostimulatory; tumour; viral infection; bacterial infection;  
KW fungal infection; parasitic infection; cancer; asthma;  
KW infectious disease; allergy; immune deficiency; phosphorothioate; ss.  
XX  
OS Synthetic.  
XX  
XX WO200122972-A2.  
XX  
XX 05-APR-2001.  
XX  
XX 25-SEP-2000; 2000WO-US026383.  
XX  
XX 25-SEP-1999; 99US-0156113P.  
XX 27-SEP-1999; 99US-0156135P.  
XX 23-AUG-2000; 2000US-0227436P.  
XX  
PA (IOWA ) UNIV IOWA RES FOUND.  
PA (COLE-) COLEY PHARM GMBH.  
XX  
XX Krieg AM, Schetter C, Vollmer J;  
PI WPI; 2001-273485/28.  
XX  
XX Vaccinating against tumors, infectious diseases, allergies and asthma  
PT using immunostimulatory Py-rich and TG nucleic acids.  
PT  
XX Claim 101; Page 41; 338pp; English.  
XX  
XX The present invention relates to a method for stimulating an immune  
CC response. The method comprises administering an immunostimulatory nucleic  
CC acid to a non-rodent subject in sufficient quantity to stimulate an  
CC immune response. The present sequence is one such immunostimulatory  
CC nucleic acid. The immunostimulatory nucleic acids can be pyrimidine rich  
CC (py-rich) or thymidine (T) rich. The method is used to vaccinate subjects  
CC against tumour antigens, viral antigens (e.g. herpesviridae, retroviridae  
CC and/or orthomyxoviridae), bacterial antigens (e.g. toxoplasma,  
CC haemophilus, campylobacter, clostridium, Escherichia coli and/or  
CC staphylococcus), fungal antigens and/or parasitic antigens. The method is  
CC also useful for preventing cancer, asthma, infectious disease, allergy or  
CC immune deficiency. The present sequence can also be used to redirect a  
CC Th2 to a Th1 immune response and to activate immune cells. Note: the  
CC present sequence may have a phosphorothioate backbone  
XX  
SQ Sequence 20 BP; 0 A; 10 C; 10 G; 0 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 520 CGGGCGCGCGCGCGGCC 536  
Db 19 CGGCGCGCGCGCGCGGCC 3  
RESULT 4675  
AAS43136/c  
ID AAS43136 standard; DNA; 20 BP.  
XX  
AC AAS43136;  
XX  
DT 18-DEC-2001 (first entry)  
XX  
XX Human ERbeta gene, ER2, 5' splice donor, exon -2.  
DE  
XX Human; Oestrogen receptor beta; ERbeta; ds; SNP; chromosome 6q.25-1;  
KW single nucleotide polymorphism; cardiovascular disease; 5' splice donor;  
KW autoimmune disease; systemic lupus erythematosus; arthritis; rheumatism;  
KW osteoarthritis; osteoporosis; breast cancer; endometrial cancer.  
XX  
OS Homo sapiens.

XX WO200162793-A2.  
PN 30-AUG-2001.  
XX 20-FEB-2001; 2001WO-US005360.  
XX 22-FEB-2000; 2000US-0183755P.  
PR 24-JAN-2001; 2001US-00768185.  
XX (PEKE ) PE CORP NY.  
XX Kalush F, Cassel MJ, Hwang SS, Winn-Deen ES;  
PI WPI; 2001-582041/65.  
XX  
XX Estrogen receptor gene and protein polymorphisms useful for diagnosis of  
PT individuals at risk of developing bone disorders.  
XX  
XX Example 2; Page 56; 245pp; English.  
XX  
XX The invention relates to a novel isolated peptide comprising or  
CC consisting of an amino acid sequence selected from an amino acid sequence  
CC of a variant oestrogen receptor protein (e.g. ERbeta), or a fragment of  
CC 10 amino acids), antibodies against them, nucleic acids encoding them  
CC (including vectors for transforming cells). The gene for human ERbeta is  
CC located on chromosome 6q.25.1. The variants are encoded by single  
CC nucleotide polymorphisms (SNP). The variant peptides and proteins can be  
CC used in assays to determine the biological activity of the protein, to  
CC raise antibodies, as a reagent in assays designed to quantitatively  
CC determine levels of the protein in biological fluids, to identify  
CC compounds that modulate receptor activity and to screen compounds for the  
CC ability to stimulate or inhibit interaction between the receptor protein  
CC and a target molecule that normally interacts with the receptor protein  
CC e.g. oestrogen. The antibody can be used to isolate the protein, to  
CC assess expression in disease states e.g. cardiovascular disease and  
CC autoimmune disease (e.g. systemic lupus erythematosus, arthritis,  
CC rheumatism and osteoarthritis), osteoporosis, breast cancer and  
CC endometrial cancer. In addition the antibodies can be used in  
CC pharmacogenomic analysis and inhibiting protein function, e.g. blocking  
CC the binding of the oestrogen receptor protein to a binding partner such  
CC as a ligand. The nucleic acids encoding the proteins can be used as  
CC probes, primers, chemical intermediates and in biological assays. The  
CC present sequence is a 5' splice donor site from the human ERbeta gene  
XX  
SQ Sequence 20 BP; 2 A; 3 C; 4 G; 11 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1481 AACAAACCCCTGGAGAA 1497  
Db 19 AACAAACCCCTGTAAA 3  
RESULT 4676  
AAH39349  
ID AAH39349 standard; DNA; 20 BP.  
XX  
AC AAH39349;  
XX 14-AUG-2001 (first entry)  
XX  
DE SNP specific upper PCR primer SEQ ID 2145.  
XX  
KW Single nucleotide polymorphism; SNP; single nucleotide primer extension;  
KW SNPE; genotyping; agammaglobulinaemia; diabetes insipidus; cancer;  
KW Lesch-Nyhan syndrome; muscular dystrophy; familial hypercholesterolaemia;  
KW polycystic kidney disease; osteogenesis imperfecta; autoimmune disease;  
KW acute intermittent porphyria; rheumatoid arthritis; multiple sclerosis;  
KW inflammation; forensic investigation; paternity analysis; PCR primer; ss.  
XX

OS Homo sapiens.  
XX  
PN WO200129262-A2.  
XX  
PD 26-APR-2001.  
XX  
XX 13-OCT-2000; 2000WO-US028436.  
PF  
XX 15-OCT-1999; 99US-0160096P.  
XX  
XX (ORCH-) ORCHID BIOSCIENCES INC.  
PA  
XX Picoult-Newburg L, Pohl M;  
PI  
XX WPI; 2001-290930/30.  
DR  
XX  
XX New genotyping oligonucleotide, useful for detecting the presence,  
PT absence or identity of single polynucleotide polymorphism in a nucleic  
PT acid sample.  
XX  
PS Claim 1; Page 60; 83pp; English.  
XX  
XX Sequences AAH37205 - AAH40944 represent PCR primers, single nucleotide  
CC primer extension (SNPE) primers, and the sequences of regions flanking  
CC sites of single nucleotide polymorphisms SNPs. The present invention  
CC includes kits for determining the presence or absence of a SNP, using the  
CC oligonucleotides of the invention. The PCR primers are used to amplify a  
CC SNP flanking sequence, the SNPE primer is used as a genotyping primer.  
CC The oligonucleotides are useful for genotyping a nucleic acid sample by  
CC performing a single-nucleotide primer extension reaction. The  
CC oligonucleotides are useful for determining the presence, absence or  
CC identity of a SNP and for genotyping nucleic acid samples, for e.g. to  
CC assess by association analysis the genotype of an individual or group of  
CC individuals, having a pathological phenotypic trait suspected of being  
CC caused by one or more SNPs. Phenotypic traits include diseases e.g.  
CC agammaglobulinaemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular  
CC dystrophy, familial hypercholesterolaemia, polycystic kidney disease,  
CC osteogenesis imperfecta and acute intermittent porphyria. Phenotypic  
CC traits also include symptoms of or susceptibility to multifactorial  
CC disease of which a component is or may be genetic such as autoimmune  
CC diseases, including, rheumatoid arthritis, multiple sclerosis,  
CC inflammation, cancer, nervous system diseases and infection by pathogenic  
CC microorganism. The method is also useful in forensic investigations and  
CC paternity analysis. The present sequence represents a PCR primer specific  
CC for a human SNP containing DNA sequence  
XX  
SQ Sequence 20 BP; 3 A; 7 C; 4 G; 6 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1442 TCCTACATGAACCCCTGG 1458  
Db 1 TCCTAGATGACCCCTGG 17  
RESULT 4677  
AAH40269/c  
ID AAH40269 standard; DNA; 20 BP.  
XX  
AC AAH40269;  
XX  
DT 14-AUG-2001 (first entry)  
XX  
DE SNP specific upper PCR primer SEQ ID 3065.  
XX  
KW Single nucleotide polymorphism; SNP; single nucleotide primer extension;  
KW SNPE; genotyping; agammaglobulinaemia; diabetes insipidus; cancer;  
KW Lesch-Nyhan syndrome; muscular dystrophy; familial hypercholesterolaemia;  
KW polycystic kidney disease; osteogenesis imperfecta; autoimmune disease;  
KW acute intermittent porphyria; rheumatoid arthritis; multiple sclerosis;  
KW inflammation; forensic investigation; paternity analysis; PCR primer; ss.  
XX

XX OS Homo sapiens.  
XX PN WO200129262-A2.  
XX PD 26-APR-2001.  
XX PF 13-OCT-2000; 2000WO-US028436.  
XX PR 15-OCT-1999; 99US-0160096P.  
XX PA (ORCH-) ORCHID BIOSCIENCES INC.  
XX PI Picoult-Newburg L, Pohl M;  
XX DR WPI; 2001-290930/30.  
XX PT New genotyping oligonucleotide, useful for detecting the presence,  
PT absence or identity of single polynucleotide polymorphism in a nucleic  
PT acid sample.  
XX PS Claim 1; Page 65; 83pp; English.  
XX CC Sequences AAH37205 - AAH40944 represent PCR primers, single nucleotide  
CC primer extension (SNPE) primers, and the sequences of regions flanking  
CC sites of single nucleotide polymorphisms SNPs. The present invention  
CC includes kits for determining the presence or absence of a SNP, using the  
CC oligonucleotides of the invention. The PCR primers are used to amplify a  
CC SNP flanking sequence, the SNPE primer is used as a genotyping primer.  
CC The oligonucleotides are useful for genotyping a nucleic acid sample by  
CC performing a single-nucleotide primer extension reaction. The  
CC oligonucleotides are useful for determining the presence, absence or  
CC identity of a SNP and for genotyping nucleic acid samples, for e.g. to  
CC assess by association analysis the genotype of an individual or group of  
CC individuals, having a pathological phenotypic trait suspected of being  
CC caused by one or more SNPs. Phenotypic traits include diseases e.g.  
CC agammaglobulinaemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular  
CC dystrophy, familial hypercholesterolaemia, polycystic kidney disease,  
CC osteogenesis imperfecta and acute intermittent porphyria. Phenotypic  
CC traits also include symptoms of or susceptibility to multifactorial  
CC disease of which a component is or may be genetic such as autoimmune  
CC diseases, including, rheumatoid arthritis, multiple sclerosis,  
CC inflammation, cancer, nervous system diseases and infection by pathogenic  
CC microorganism. The method is also useful in forensic investigations and  
CC paternity analysis. The present sequence represents a PCR primer specific  
CC for a human SNP containing DNA sequence  
XX SQ Sequence 20 BP; 4 A; 9 C; 3 G; 4 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 898 GGCTGAAGTACAGAGGC 914  
Db 20 GGCTGGAGTACAGTGGC 4  
RESULT 4678  
AAAS4439/c  
ID AAAS4439 standard; cDNA; 20 BP.  
XX AC AAAS4439;  
XX AC AAAS4439;  
XX DT 11-APR-2001 (first entry)  
XX DE Primer for amplifying 11-cis retinol dehydrogenase (RDH5).  
XX KW 11-cis retinol dehydrogenase; RDH5; eye; mutant; mutation;  
KW ocular disease; fundus albipunctatus; retinitis punctata albescentis;  
KW albipunctate dystrophy; retinitis pigmentosa; human; primer; ss.  
XX OS Homo sapiens.

XX PN WO200068364-A2.  
XX PD 16-NOV-2000.  
XX PF 08-MAY-2000; 2000WO-US012527.  
XX PR 06-MAY-1999; 99US-00306538.  
XX PA (LUDW-) LUDWIG INST CANCER RES.  
PA (HARD ) HARVARD COLLEGE.  
XX PA (MASS-) MASSACHUSETTS EYE & EAR INFIRMARY.  
XX PI Simon A, Eriksson U, Dryja TP, Berson EL, Yamamoto H;  
XX DR WPI; 2001-016091/02.  
XX PT Mutations in nucleic acid molecules encoding 11-cis retinol dehydrogenase  
PT correlated to ocular disorders, useful in diagnosis and treatment of  
PT diseases such as fundus albipunctatus.  
XX PS Example 1; Page 7; 28pp; English.  
XX CC A new protein is described which comprises the 318 residue amino acid  
CC sequence corresponding to wild type retinol dehydrogenase (RDH5), but  
CC where amino acid 238 is not Gly, amino acid 73 is not Ser, or amino acid  
CC 33 is not Ile. This mutant RDH5 can be used in the analysis of mutations  
CC in the gene encoding retinol dehydrogenase, in the diagnosis and  
CC treatment of ocular diseases associated with retinal degeneration such as  
CC fundus albipunctatus. Other disorders which may also be studied include  
CC retinitis punctata albescentis, albipunctate dystrophy and retinitis  
CC pigmentosa. A number of primer pairs (See GENESEQ records AAA54433-  
CC A54448) were used to amplify the genomic RDH5 DNA. Two primers (AAA54439,  
CC AAA54440) were used to amplify exon 3a of the RDH5 gene. This primer  
CC corresponds to nucleotides 2848-2867 of the genomic DNA sequence (See  
CC GENESEQ record AAA54431)  
XX SQ Sequence 20 BP; 3 A; 9 C; 1 G; 7 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 2549 ATTAAGAGGATGCTGGG 2565  
Db 18 ATGAAAGGATGCTGGG 2  
RESULT 4679  
AAD09639  
ID AAD09639 standard; DNA; 20 BP.  
XX AC AAD09639;  
XX AC AAD09639;  
XX DT 10-SEP-2001 (first entry)  
XX DE Human PKA C-alpha chimeric antisense oligonucleotide (ISIS# 102604).  
XX KW Human; protein kinase A; PKA catalytic subunit C-alpha inhibitor;  
KW therapy; infection; inflammation; tumour; prophylaxis; antisense;  
KW phosphorothioate backbone; chimeric; ss.  
XX OS Homo sapiens.  
OS Synthetic.  
OS Chimeric.  
XX Key Location/Qualifiers  
FH modified\_base 1..20  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "Phosphorothioate backbone"  
FT modified\_base 1..5  
FT /\*tag= b

FT /mod\_base= OTHER  
FT modified\_base 2 /note= "Methoxyethyl residues"  
FT /tag= c  
FT /mod\_base= m5c  
FT modified\_base 4 /tag= d  
FT /mod\_base= m5c  
FT misc\_feature 6...15 /tag= e  
FT /note= "Central gap region"  
FT modified\_base 16..20 /tag= f  
FT /mod\_base= OTHER  
FT modified\_base 16..17 /note= "Methoxyethyl residues"  
FT /tag= g  
FT /mod\_base= m5c  
XX  
PN US6248586-B1.  
XX 19-JUN-2001.  
XX 17-DEC-1999; 99US-00467082.  
XX 17-DEC-1999; 99US-00467082.  
XX (ISIS-) ISIS PHARM INC.  
XX Monia BP, Cowsert LM;  
XX WPI; 2001-407321/43.  
XX Antisense oligonucleotides for inhibiting the expression of the human  
PT protein kinase A catalytic subunit C-alpha, particularly useful for  
PT preventing, delaying or treating infection, inflammation or tumor  
PT formation.  
XX Claim 1; Col 44; 35pp; English.  
PS  
XX The invention is directed to antisense compounds, particularly  
CC oligonucleotides which are targetted to a DNA encoding human protein  
CC kinase A (PKA) catalytic subunit C-alpha to modulate (inhibit) its  
CC expression. The antisense compounds are useful for diagnostics,  
CC therapeutics, prophylaxis and as research reagents or kits. The antisense  
CC oligonucleotides are useful for treating human, suspected of having or  
CC being prone to a disease or condition associated with the expression of  
CC PKA catalytic subunit C-alpha. In particular, the antisense  
CC oligonucleotides are useful for preventing, delaying or treating  
CC infection, inflammation and tumour formation. They are also useful in  
CC antisense therapy. The present sequence is a chimeric antisense  
CC oligonucleotide with a phosphorothioate backbone. This oligo is targetted  
CC to the start codon of human PKA catalytic subunit C-alpha to inhibit its  
CC expression  
XX  
SQ Sequence 20 BP; 0 A; 7 C; 12 G; 1 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 50 CGCGCGGGGGCGGCGG 66  
Db ||||| |||||  
2 CGCGCGGCGGCGGCGG 18  
RESULT 4680  
AAD09640  
ID AAD09640 standard; DNA; 20 BP.  
XX  
AC AAD09640;  
XX  
DT 10-SEP-2001 (first entry)

XX Human PKA C-alpha chimeric antisense oligonucleotide (ISIS# 102609).  
XX  
KW Human; protein kinase A; PKA catalytic subunit C-alpha inhibitor;  
KW therapy; infection; inflammation; tumour; prophylaxis; antisense;  
KW phosphorothioate backbone; chimeric; ss.  
XX  
OS Homo sapiens.  
OS Synthetic.  
OS Chimeric.  
XX  
FH Key Location/Qualifiers  
FT modified\_base 1..20 /tag= a  
FT /mod\_base= OTHER  
FT /note= "Phosphorothioate backbone"  
FT modified\_base 1..5 /tag= b  
FT /mod\_base= OTHER  
FT /note= "Methoxyethyl residues"  
FT modified\_base 1 /tag= c  
FT /mod\_base= m5c  
FT modified\_base 4 /tag= d  
FT /mod\_base= m5c  
FT misc\_feature 6..15 /tag= e  
FT /note= "Central gap region"  
FT modified\_base 16..20 /tag= f  
FT /mod\_base= OTHER  
FT /note= "Methoxyethyl residues"  
FT modified\_base 18..19 /tag= g  
FT /mod\_base= m5c  
XX  
PN US6248586-B1.  
XX 19-JUN-2001.  
XX 17-DEC-1999; 99US-00467082.  
XX 17-DEC-1999; 99US-00467082.  
XX (ISIS-) ISIS PHARM INC.  
XX Monia BP, Cowsert LM;  
XX WPI; 2001-407321/43.  
XX Antisense oligonucleotides for inhibiting the expression of the human  
PT protein kinase A catalytic subunit C-alpha, particularly useful for  
PT preventing, delaying or treating infection, inflammation or tumor  
PT formation.  
XX Claim 1; Col 44; 35pp; English.  
PS  
XX The invention is directed to antisense compounds, particularly  
CC oligonucleotides which are targetted to a DNA encoding human protein  
CC kinase A (PKA) catalytic subunit C-alpha to modulate (inhibit) its  
CC expression. The antisense compounds are useful for diagnostics,  
CC therapeutics, prophylaxis and as research reagents or kits. The antisense  
CC oligonucleotides are useful for treating human, suspected of having or  
CC being prone to a disease or condition associated with the expression of  
CC PKA catalytic subunit C-alpha. In particular, the antisense  
CC oligonucleotides are useful for preventing, delaying or treating  
CC infection, inflammation and tumour formation. They are also useful in  
CC antisense therapy. The present sequence is a chimeric antisense  
CC oligonucleotide with a phosphorothioate backbone. This oligo is targetted  
CC to the start codon of human PKA catalytic subunit C-alpha to inhibit its  
CC expression



SQ Sequence 20 BP; 1 A; 8 C; 10 G; 1 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 50 CGCGCGCGCGCGCGCG 66  
Db 4 CGCGCGCGCGCGCGCG 20  
RESULT 4681  
AAF54613/c  
ID AAF54613 standard; DNA; 20 BP.  
XX  
AC AAF54613;  
XX  
DT 03-APR-2001 (first entry)  
XX  
DE Human HLA Class I oligonucleotide probe SEQ ID NO: 58.  
XX  
KW Human; HLA typing; oligonucleotide array; Class I; gene discovery;  
KW expression; polymorphism detection; mapping; probe; PCR primer; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO200079006-A1.  
XX  
PD 28-DEC-2000.  
XX  
PF 16-JUN-2000; 2000WO-US016722.  
XX  
PR 17-JUN-1999; 99US-0139843P.  
XX  
PA (HUTC-) HUTCHINSON CANCER RES CENT FRED.  
XX  
PI (UNIW ) UNIV WASHINGTON.  
XX  
PT Petersdorf EW, Guo Z, Hansen JA, Hood L;  
XX  
DR WPI; 2001-102734/11.  
XX  
PT Oligonucleotide arrays useful for human leukocyte antigen (HLA) tissue  
PT typing, comprises HLA class I oligonucleotide probes representing all  
PT known polymorphisms in HLA class I locus, on a solid support.  
XX  
OS Homo sapiens.  
XX  
PN WO200079006-A1.  
XX  
PD 28-DEC-2000.  
XX  
PF 16-JUN-2000; 2000WO-US016722.  
XX  
PR 17-JUN-1999; 99US-0139843P.  
XX  
PA (HUTC-) HUTCHINSON CANCER RES CENT FRED.  
XX  
PI (UNIW ) UNIV WASHINGTON.  
XX  
PT Petersdorf EW, Guo Z, Hansen JA, Hood L;  
XX  
DR WPI; 2001-102734/11.  
XX  
PT Oligonucleotide arrays useful for human leukocyte antigen (HLA) tissue  
PT typing, comprises HLA class I oligonucleotide probes representing all  
PT known polymorphisms in HLA class I locus, on a solid support.  
XX  
PS Disclosure; Page 60; 83pp; English.  
XX  
CC The present invention provides a microarray of oligonucleotides  
CC comprising probes for the human HLA Class I genes attached to a solid  
CC support. These can be used in HLA typing. Oligonucleotide arrays are also  
CC useful in large scale gene discovery, monitoring gene expression,  
CC polymorphism detection and gene mapping  
XX  
SQ Sequence 20 BP; 2 A; 3 C; 11 G; 4 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 617 CCCACGCACACGCCCT 633  
Db 17 CTCACGCACACGCCCT 1  
RESULT 4682  
AAF54596/c  
ID AAF54596 standard; DNA; 20 BP.  
XX  
AC AAF54596;  
XX  
DT 03-APR-2001 (first entry)  
XX  
DE Human HLA Class I oligonucleotide probe SEQ ID NO: 41.

XX  
KW Human; HLA typing; oligonucleotide array; Class I; gene discovery;  
KW expression; polymorphism detection; mapping; probe; PCR primer; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO200079006-A1.  
XX  
PD 28-DEC-2000.  
XX  
PF 16-JUN-2000; 2000WO-US016722.  
XX  
PR 17-JUN-1999; 99US-0139843P.  
XX  
PA (HUTC-) HUTCHINSON CANCER RES CENT FRED.  
XX  
PI (UNIW ) UNIV WASHINGTON.  
XX  
PT Petersdorf EW, Guo Z, Hansen JA, Hood L;  
XX  
DR WPI; 2001-102734/11.  
XX  
PT Oligonucleotide arrays useful for human leukocyte antigen (HLA) tissue  
PT typing, comprises HLA class I oligonucleotide probes representing all  
PT known polymorphisms in HLA class I locus, on a solid support.  
XX  
PS Disclosure; Page 55; 83pp; English.  
XX  
CC The present invention provides a microarray of oligonucleotides  
CC comprising probes for the human HLA Class I genes attached to a solid  
CC support. These can be used in HLA typing. Oligonucleotide arrays are also  
CC useful in large scale gene discovery, monitoring gene expression,  
CC polymorphism detection and gene mapping  
XX  
SQ Sequence 20 BP; 2 A; 9 C; 8 G; 1 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1383 GTGCCGCGGTGTCTGCC 1399  
Db 20 GAGCCGCGGTGTCTGCC 4  
RESULT 4683  
AAF54612/c  
ID AAF54612 standard; DNA; 20 BP.  
XX  
AC AAF54612;  
XX  
DT 03-APR-2001 (first entry)  
XX  
DE Human HLA Class I oligonucleotide probe SEQ ID NO: 57.  
XX  
KW Human; HLA typing; oligonucleotide array; Class I; gene discovery;  
KW expression; polymorphism detection; mapping; probe; PCR primer; ss.  
OS Homo sapiens.  
XX  
PN WO200079006-A1.  
XX  
PD 28-DEC-2000.  
XX  
PF 16-JUN-2000; 2000WO-US016722.  
XX  
PR 17-JUN-1999; 99US-0139843P.  
XX  
PA (HUTC-) HUTCHINSON CANCER RES CENT FRED.  
XX  
PI (UNIW ) UNIV WASHINGTON.  
XX  
PT Petersdorf EW, Guo Z, Hansen JA, Hood L;  
XX  
DR WPI; 2001-102734/11.

XX Oligonucleotide arrays useful for human leukocyte antigen (HLA) tissue  
PT typing, comprises HLA class I oligonucleotide probes representing all  
PT known polymorphisms in HLA class I locus, on a solid support.  
XX  
PS Disclosure; Page 59; 83pp; English.  
XX  
CC The present invention provides a microarray of oligonucleotides  
CC comprising probes for the human HLA Class I genes attached to a solid  
CC support. These can be used in HLA typing. Oligonucleotide arrays are also  
CC useful in large scale gene discovery, monitoring gene expression,  
CC polymorphism detection and gene mapping  
XX  
SQ Sequence 20 BP; 3 A; 2 C; 12 G; 3 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 617 CCCACGCACACGCCCT 633  
Db 17 CTCACGCACTCGCCCT 1  
  
RESULT 4684  
AAF54615/c  
ID AAF54615 standard; DNA; 20 BP.  
XX  
AC AAF54615;  
XX  
DT 03-APR-2001 (first entry)  
XX  
DE Human HLA Class I oligonucleotide probe SEQ ID NO: 60.  
XX  
KW Human; HLA typing; oligonucleotide array; Class I; gene discovery;  
KW expression; polymorphism detection; mapping; probe; PCR primer; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO200079006-A1.  
XX  
PD 28-DEC-2000.  
XX  
PF 16-JUN-2000; 2000WO-US016722.  
XX  
PR 17-JUN-1999; 99US-0139843P.  
XX  
PA (HUTC-) HUTCHINSON CANCER RES CENT FRED.  
PA (UNIW ) UNIV WASHINGTON.  
PI Petersdorf EW, Guo Z, Hansen JA, Hood L;  
XX  
DR WPI; 2001-102734/11.  
XX  
PT Oligonucleotide arrays useful for human leukocyte antigen (HLA) tissue  
PT typing, comprises HLA class I oligonucleotide probes representing all  
PT known polymorphisms in HLA class I locus, on a solid support.  
XX  
PS Disclosure; Page 60; 83pp; English.  
XX  
CC The present invention provides a microarray of oligonucleotides  
CC comprising probes for the human HLA Class I genes attached to a solid  
CC support. These can be used in HLA typing. Oligonucleotide arrays are also  
CC useful in large scale gene discovery, monitoring gene expression,  
CC polymorphism detection and gene mapping  
XX  
SQ Sequence 20 BP; 2 A; 4 C; 10 G; 4 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 617 CCCACGCACACGCCCT 633

Db 17 CTCACGCACAGGCCCT 1  
  
RESULT 4685  
AAF54617/c  
ID AAF54617 standard; DNA; 20 BP.  
XX  
AC AAF54617;  
XX  
DT 03-APR-2001 (first entry)  
XX  
DE Human HLA Class I oligonucleotide probe SEQ ID NO: 62.  
XX  
KW Human; HLA typing; oligonucleotide array; Class I; gene discovery;  
KW expression; polymorphism detection; mapping; probe; PCR primer; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO200079006-A1.  
XX  
PD 28-DEC-2000.  
XX  
PF 16-JUN-2000; 2000WO-US016722.  
XX  
PR 17-JUN-1999; 99US-0139843P.  
XX  
PA (HUTC-) HUTCHINSON CANCER RES CENT FRED.  
PA (UNIW ) UNIV WASHINGTON.  
PI Petersdorf EW, Guo Z, Hansen JA, Hood L;  
XX  
DR WPI; 2001-102734/11.  
XX  
PT Oligonucleotide arrays useful for human leukocyte antigen (HLA) tissue  
PT typing, comprises HLA class I oligonucleotide probes representing all  
PT known polymorphisms in HLA class I locus, on a solid support.  
XX  
PS Disclosure; Page 61; 83pp; English.  
XX  
CC The present invention provides a microarray of oligonucleotides  
CC comprising probes for the human HLA Class I genes attached to a solid  
CC support. These can be used in HLA typing. Oligonucleotide arrays are also  
CC useful in large scale gene discovery, monitoring gene expression,  
CC polymorphism detection and gene mapping  
XX  
SQ Sequence 20 BP; 2 A; 3 C; 12 G; 3 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 617 CCCACGCACACGCCCT 633  
Db 17 CTCACGCACAGGCCCT 1  
  
RESULT 4686  
AAH40966  
ID AAH40966 standard; DNA; 20 BP.  
XX  
AC AAH40966;  
XX  
DT 17-AUG-2001 (first entry)  
XX  
DE Primer SEQ ID 14 used to sequence dioxin gene.  
XX  
KW Golden hamster; dioxin receptor; dioxin like substance;  
KW sequencing primer; ss.  
XX  
OS Synthetic.  
XX  
PN JP2001078782-A.

XX 27-MAR-2001.  
PD  
XX  
XX 27-APR-2000; 2000JP-00127243.  
PF  
XX  
XX 09-JUL-1999; 99JP-00196035.  
PR  
XX  
XX (SUMO ) SUMITOMO CHEM CO LTD.  
PA  
XX  
XX WPI; 2001-412348/44.  
DR  
XX  
XX Dioxin receptor gene useful for determining a dioxin-like substance.  
PT  
XX  
XX Example 3; Page 21; 23pp; Japanese.  
PS  
XX  
XX This invention relates to a dioxin receptor gene which encodes a hamster  
CC dioxin receptor, AAH40954 and AAB97388 respectively. The dioxin receptor  
CC gene can be used for the determination of a dioxin-like substance.  
CC Sequences AAH40959 - AAH40968 represent primers used to sequence the  
CC dioxin gene of the invention  
XX  
XX Sequence 20 BP; 8 A; 3 C; 5 G; 4 T; 0 U; 0 Other;  
SQ  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 2243 AGGTACTGAAGCTTTAT 2259  
Db 4 AGGAACTGAAGCATTAT 20  
RESULT 4687  
AAS12283  
ID AAS12283 standard; DNA; 20 BP.  
XX  
AC AAS12283;  
XX  
XX 21-NOV-2001 (first entry)  
DT  
XX  
XX DNA encoding class I deoxyribozyme, DNazyme motif #2.  
DE  
XX  
KW Deoxyribozyme; cytotstatic; endonuclease; RNA cleavage; DNA cleavage;  
KW gene therapy; plant; fungus; bacteria; mammal; mammal; ribozyme; ss.  
XX  
XX Synthetic.  
OS  
XX WO200159102-A2.  
PN  
XX 16-AUG-2001.  
PD  
XX 08-FEB-2001; 2001WO-US004223.  
PF  
XX 08-FEB-2000; 2000US-0181360P.  
PR  
XX 31-MAR-2000; 2000US-0193646P.  
PR  
XX (RIBO-) RIBOZYME PHARM INC.  
PA  
XX (UYIA ) UNIV YALE.  
PI Breaker R, Beigelman L, Emilsson G;  
XX  
XX WPI; 2001-536526/59.  
DR  
XX New nucleic acids with endonuclease activity, such as ribozymes and  
PT nucleozymes, for modulating gene expression in a plant, mammalian,  
PT bacterial or fungal cell.  
PT  
XX Example 1; Fig 5; 96pp; English.  
PS  
XX The invention relates to nucleic acid molecules with endonuclease  
CC activity, which are particularly useful for cleavage of RNA or DNA. The  
CC nucleic acids are used in a pharmaceutical composition and are used to  
CC modulate expression of a gene in a plant, mammalian, bacterial or fungal  
CC

CC cell. They are used to cleave a separate nucleic acid, preferably RNA.  
CC The nucleic acids are used to inhibit gene expression and/or cell  
CC proliferation, and can be used to treat a disease or condition. More than  
CC one nucleic acid can be independently targeted to the same or different  
CC sites in a cell. The nucleic acids may be used to study DNA. The  
CC modifications to the nucleic acids optimises their catalytic activity and  
CC can maintain or enhance their activity. They exhibit a high degree of  
CC specificity for RNA. The present sequence represents the coding sequence  
CC of class I deoxyribozyme, DNazyme motif #2 used in the method of the  
CC invention  
XX  
XX Sequence 20 BP; 9 A; 0 C; 6 G; 0 T; 5 U; 0 Other;  
SQ  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 64.7%; Pred. No. 4.3e+03;  
Matches 11; Conservative 4; Mismatches 2; Indels 0; Gaps 0;  
QY 2537 AGGTATTAAAGAATTAA 2553  
Db 2 AGGUAUUAUAUGAA 18  
RESULT 4688  
AAD17451  
ID AAD17451 standard; DNA; 20 BP.  
XX  
AC AAD17451;  
XX  
XX 10-DEC-2001 (first entry)  
DT  
XX  
XX Human TNF-alpha cDNA amplifying gene specific RT-PCR primer #1.  
DE  
XX  
KW Human; Tpl2; serine threonine kinase; tumour necrosis factor; TNFalpha;  
KW inflammatory disease; therapy; rheumatoid arthritis; endotoxin shock;  
KW research tool; LPS; lipopolysaccharide; RT-PCR primer; ss.  
XX  
XX Homo sapiens.  
OS  
XX WO200166559-A1.  
PN  
XX 13-SEP-2001.  
PD  
XX 08-MAR-2001; 2001WO-US007588.  
PF  
XX 08-MAR-2000; 2000US-00522775.  
PR  
XX (UYJE-) UNIV JEFFERSON THOMAS.  
PA  
XX Tsichlis PN;  
PI  
XX WPI; 2001-582266/65.  
DR  
XX Knock-out animal resistant to lipopolysaccharide-induced endotoxin shock  
PT and tumor necrosis factor alpha-mediated inflammatory disease, comprises  
PT a functionally disrupted endogenous Tpl2 gene.  
XX  
XX Example 7; Page 48; 98pp; English.  
PS  
XX The invention relates to an animal with a structurally intact Tpl2 gene  
CC but functionally disrupted endogenous Tpl2 (a protooncogene which encodes  
CC a cytoplasmic serine threonine protein kinase). The animal has increased  
CC resistance to lipopolysaccharide-induced endotoxin shock or tumour  
CC necrosis factor (TNF) alpha-mediated inflammatory diseases. Tpl2 protein  
CC and DNA are useful for identifying compounds that agonise or inhibit the  
CC function of Tpl2 protein. Tpl2 is useful for treating rheumatoid  
CC arthritis. TNFalpha-mediated inflammatory diseases or LPS induced  
CC endotoxin shock, may be treated by transfecting bone marrow derived cells  
CC invitro with a DNA construct which encodes sequences that interferes with  
CC the expression of function of the endogenous Tpl2 in the cells and  
CC administering the cells to an animal. The knock out animals and the  
CC constructs used to generate the animals are useful in the development of  
CC compositions and methods of treating inflammation. Tpl2 agonist and  
CC antagonist are useful as targets for the development of novel therapeutic

CC agents which eliminate the functional role of Tpl2 and as research tools  
CC to facilitate the elucidation of the mechanistic action of the novel  
CC genetic and protein interactions involved in inflammatory disorders. Tpl2  
CC polynucleotide sequences facilitate the discovery and development of anti  
CC endotoxin shock and/or antiinflammatory compounds. The present sequence  
CC is a reverse transcription (RT) PCR used for amplifying human TNFalpha  
CC cDNA  
XX  
SQ Sequence 20 BP; 5 A; 10 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1855 CAGACCCACACACTTAG 1871  
||||| ||||| ||  
Db 4 CAGACCCCTCACACTCAG 20

RESULT 4689  
AAH49468  
ID AAH49468 standard; DNA; 20 BP.  
XX  
AC AAH49468;  
XX  
DT 11-DEC-2001 (first entry)  
XX  
DE D. melanogaster peptide receptor PCR primer 21s.  
XX  
KW Insect; fruitfly; peptide receptor; plant protection; insecticide;  
KW PCR primer; ss.  
XX  
OS Drosophila melanogaster.  
XX  
PN DE10013618-A1.  
XX  
PD 20-SEP-2001.  
XX  
PF 18-MAR-2000; 2000DE-01013618.  
XX  
PR 18-MAR-2000; 2000DE-01013618.  
XX  
PA (FARB ) BAYER AG.  
XX  
PI Antonicek H, Friedrich G, Schulte T;  
XX  
DR WPI; 2001-571695/65.  
XX  
PT New polypeptides from Drosophila melanogaster have biological activity of  
PT peptide receptor, useful to find new compounds for plant protection and  
PT insecticides.

XX  
PS Example 1; Page 8; 128pp; German.  
XX  
CC This invention describes novel polypeptides (P1) from Drosophila  
CC melanogaster having the biological activity of a peptide receptor.  
CC Molecules of the invention are used to find new plant protection  
CC compounds or insecticides, or to find genes encoding a polypeptide  
CC involved in the structure of functionally similar receptors in insects  
CC This sequence represents a PCR primer used in the amplification of the  
CC genes encoding the Drosophila melanogaster (fruitfly) peptide receptor  
CC described in the method of the invention  
XX  
SQ Sequence 20 BP; 3 A; 9 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 598 CCGCTCCGACCTGCTGC 614  
||||| ||||| |||||  
Db 4 CAGCTCCTACCTGCTGC 20

RESULT 4690  
ABK53147/c  
ID ABK53147 standard; DNA; 20 BP.  
XX  
AC ABK53147;  
XX

DT 29-AUG-2003 (revised)  
DT 12-AUG-2002 (first entry)  
XX

DE HIV-1 Gag gene specific oligonucleotide primer #11.

XX HIV; human immunodeficiency virus; ss; primer; gag; pol; protease;  
KW reverse transcriptase; infection; PCR.

XX Human immunodeficiency virus 1.

OS US2002055095-A1.

XX 09-MAY-2002.

PF 31-AUG-2001; 2001US-00944036.

PR 01-SEP-2000; 2000US-0229790P.

XX (YANG/) YANG Y Y.  
PA (BREN/) BRENTANO S T.  
PA (BABO/) BABOLA O.  
PA (TRAN/) TRAN N.  
PA (VERN/) VERNET G.

PI Yang YY, Brentano ST, Babola O, Tran N, Vernet G;  
XX WPI; 2002-462902/49.  
DR  
XX

PT New nucleic acid oligomers for amplifying a nucleotide sequence from HIV-  
PT 1 and probes for detecting the amplified product are specific for gag and  
PT pol regions and are useful to detect different subtypes of HIV-1.  
XX

PS Claim 1; Page 27; 37pp; English.

XX  
CC This invention relates to a series of nucleic acid oligomers for  
CC amplifying and detecting a nucleotide sequence of human immunodeficiency  
CC virus type 1 (HIV-1). The invention also comprises a labeled  
CC oligonucleotide that specifically hybridises to an HIV-1 sequence derived  
CC from gag or pol sequences, having one of the sequences fully defined in  
CC the specification, and a method for detecting HIV-1 in a biological  
CC sample, comprising mixing the sample with two or more of the  
CC amplification oligomers that specifically amplify at least one HIV-1  
CC target sequence within gag and a pol sequence which is a protease or  
CC reverse transcriptase sequence, amplifying the target, and detecting the  
CC amplified product. The oligonucleotides of the invention may be used to  
CC diagnose HIV-1 infection. The presents sequence represents a PCR primer  
CC used to amplify the HIV-1 Gag gene in the HIV detection method of the  
CC invention. (Updated on 29-AUG-2003 to standardise OS field)

XX Sequence 20 BP; 3 A; 4 C; 6 G; 7 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1729 ATTATCAGAAGGTGACA 1745  
||||| ||||| |||||  
Db 20 ATTATCAGAAGGAGCCA 4

RESULT 4691  
ABQ82398/c  
ID ABQ82398 standard; DNA; 20 BP.

XX  
AC ABQ82398;  
XX



DT 17-DEC-2002 (first entry)

XX Human NOV4 forward PCR primer SEQ ID NO:284.

DE Human; NOVX; cytostatic; neuroprotective; anticonvulsant; cardiovascular; cerebroprotective; nootropic; antidiabetic; antiinflammatory; fungicide; antirheumatic; antiarthritic; immunosuppressive; antiallergic; virucide; antianaemic; antibacterial; protozoacide; antihelminthic; gene therapy; cancer; leukaemia; lymphoma; melanoma; neurological disorder; epilepsy; stroke; ischaemic cerebrovascular disease; Alzheimer's disease; allergy; Pick's disease; vesicular transport disease; cystic fibrosis; goitre; diabetes mellitus; Grave's disease; gastrointestinal disorder; vaccine; ulcerative colitis; gastric disorder; duodenal disorder; infection; autoimmune disease; allergic reaction; autoimmune haemolytic anaemia; rheumatoid arthritis; PCR primer; ss.

XX Homo sapiens.

OS WO200262999-A2.

XX 15-AUG-2002.

PN 31-DEC-2001; 2001WO-US049976.

XX 29-DEC-2000; 2000US-0258928P.

PR 02-JAN-2001; 2001US-0259415P.

PR 04-JAN-2001; 2001US-0259785P.

PR 20-FEB-2001; 2001US-0269814P.

PR 09-MAR-2001; 2001US-0279863P.

PR 29-MAR-2001; 2001US-0279832P.

PR 29-MAR-2001; 2001US-0279833P.

PR 13-APR-2001; 2001US-0283889P.

PR 18-APR-2001; 2001US-0284447P.

PR 25-APR-2001; 2001US-0286683P.

PR 29-MAY-2001; 2001US-0294080P.

PR 16-AUG-2001; 2001US-0312915P.

PR 17-AUG-2001; 2001US-0313325P.

PR 17-SEP-2001; 2001US-0322699P.

PR 26-NOV-2001; 2001US-0333350P.

XX (CURA-) CURAGEN CORP.

XX Spytek KA, Li L, Wolenc AR, Vernet CAM, Eisen A, Liu X; Malyankar U, Shimkets RA, Tchernev VT, Spaderna SK, Gorman L; Kekuda R, Patturajan M, Gusev V, Gangolli EA, Guo X, Shenoy S; Rastelli L, Casman SJ, Boldog F, Burgess CE, Edinger S, Ellerman K; Gunther E, Smithson G, Millet I, Macdougall JR; WPI; 2002-732706/79.

XX New NOVX polypeptides and polynucleotides useful for treating NOVX-associated disorders, such as cancers, neurological disorders, disorders of vesicular transport, gastrointestinal disorders, and autoimmune diseases.

XX Example 2; Page 313; 444pp; English.

XX The present invention describes novel human proteins designated NOVX, where X is 1 to 20 e.g. NOV1. NOVX sequences can have neuroprotective, cytostatic, anticonvulsant, cerebroprotective, nootropic, cardiovascular, antidiabetic, antiinflammatory, antirheumatic, antiarthritic, virucide, immunosuppressive, antiallergic, antianaemic, antibacterial, fungicide, protozoacide and antihelminthic activities, and can be used in gene therapy. The NOVX proteins, nucleotides or antibodies can be used in the manufacture of a medicament for treating a syndrome associated with a human disease selected from NOVX-associated disorder, such as cancers (e.g. leukaemia, lymphoma, melanoma or cancer of the liver, lung, muscle, ovary, testis and uterus), neurological disorders (e.g. epilepsy, stroke, ischaemic cerebrovascular disease, Alzheimer's disease or Pick's disease), disorders of vesicular transport (e.g. cystic fibrosis, diabetes mellitus, Grave's disease, or goitre), gastrointestinal disorders (e.g. ulcerative colitis, or gastric and duodenal disorders), autoimmune diseases (e.g. allergic reactions, autoimmune haemolytic

CC anaemia, or rheumatoid arthritis), viral, bacterial, fungal, helminthic and protozoal infections. The NOVX proteins can be used as immunogens to produce antibodies and as vaccines. The NOVX nucleotide sequences may be used in chromosome mapping, identifying individuals from minute biological samples (tissue typing), and in forensic identification of a biological sample. The present sequence represents a PCR primer for a human NOVX protein, which is used in an example from the present invention

XX Sequence 20 BP; 6 A; 7 C; 3 G; 4 T; 0 U; 0 Other;

SQ Query Match 0.5%; Score 13.8; DB 1; Length 20; Best Local Similarity 88.2%; Pred. No. 4.3e+03; Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1123 TGTCTGTGAAGCCGAAT 1139

Db 20 TCTCTGTGAAGCTGAAT 4

RESULT 4692

ABK13157

ID ABK13157 standard; DNA; 20 BP.

XX AC ABK13157;

XX 07-AUG-2003 (revised)

DT 23-APR-2002 (first entry)

XX DE En8183 EN transposon specific PCR primer.

XX Short-root; SHR; cell division regulator; gravitropism; root organisation; antibody; immunogen; transgenic plant; En8183; lodging; PCR; primer; transposon; Maize; ss.

XX Zea mays.

XX WO200190314-A1.

PN 29-NOV-2001.

XX 24-MAY-2001; 2001WO-US017273.

XX 24-MAY-2000; 2000US-00578827.

XX (UUNY ) UNIV NEW YORK STATE.

XX Benfey PN, Helariutta Y, Fukaki H, Nakajima K; WPI; 2002-147582/19.

XX New SHORT-ROOT genes, useful for improving agronomically valuable plants, particularly for altering or regulating the root and/or stem structure of transgenic plants to produce plants that are less susceptible to lodging.

XX Example 6.14; Page 68; 142pp; English.

XX This invention relates to the nucleic acid and protein sequence of a novel gene Short-root (SHR). SHR is expressed mainly in roots and controls cell division of certain types of roots affecting gravitropism and the organisation of root and stem. The invention also comprises an antibody that immunospecifically binds the SHR protein and plants genetically-engineered to overexpress or underexpress a SHR protein or polypeptide, so that cell division is modified, and root and/or stem development is altered. The SHR genes are useful for improving agronomically valuable plants. The SHR genes are particularly useful for altering or regulating the root and/or stem structure, and the gravitropism of aerial structures of transgenic plants. The genes are also useful for developing straighter transgenic plants that are less susceptible to lodging. The present sequence represents the En8183 maize transposon En-specific PCR primer, this primer was used in conjunction with the primer En7631 (ABK14156) to generate an En-specific probe to allow genotyping of progeny from an Shr3 heterozygote. Shr-3 and Shr-4

CC alleles were identified in lines containing the autonomously replicating  
CC maize transposon En. (Updated on 07-AUG-2003 to correct OS field.)  
XX  
SQ Sequence 20 BP; 4 A; 7 C; 4 G; 5 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 1857 GACCCACACACTTAGCC 1873  
|||||  
Db 4 GACCGACACTCTTAGCC 20  
  
RESULT 4693  
ABK11174  
ID ABK11174 standard; DNA; 20 BP.  
XX  
AC ABK11174;  
XX  
DT 05-JUN-2002 (first entry)  
XX  
DE PCR primer #1 for target DNA sequence #2.  
XX  
KW Method for producing DNA; PCR; DNA production; target DNA; primer; ss.  
XX  
OS Synthetic.  
XX  
PN EP1180547-A2.  
XX  
PD 20-FEB-2002.  
XX  
PF 25-JUL-2001; 2001EP-00306385.  
XX  
PR 28-JUL-2000; 2000JP-00229284.  
XX  
PA (NISN ) NISSHINBO IND INC.  
XX  
PI Aotsuka S;  
XX  
DR WPI; 2002-229955/29.  
XX  
PT Producing DNA, comprises using an oligomer having the Nth partial  
PT sequence or an oligomer complementary to the (N+1)th partial sequence  
PT from the 5' end of the target sequence as PCR primers and templates.  
XX  
PS Example 2; Page 42; 46pp; English.  
XX  
CC The present invention relates to a method for producing DNA. The method  
CC comprises performing PCR using an oligomer having the Nth partial  
CC sequence from the 5' end of a target sequence and an oligomer having a  
CC nucleotide sequence complementary to the (N+1)th partial sequence from  
CC the 5' end of the target sequence, as primers and templates. The method  
CC is useful for producing DNA having an arbitrary sequence, or having a  
CC length several times larger than the maximum length that can be produced  
CC by the chemical synthesis method, and since restriction enzyme treatment  
CC is not essential during production, the limitation imposed on producible  
CC DNA sequence is ameliorated. Also since a cloning step is not included as  
CC an intermediate step, and because lengths of the reaction products are  
CC approximately doubled in each step, it becomes easy to select the final  
CC product. Based on these factors, the method is more rapid and more  
CC efficient in DNA production compared to previous methods. The present  
CC sequence represents a PCR primer used in the methods of the present  
CC invention  
XX  
SQ Sequence 20 BP; 10 A; 1 C; 3 G; 6 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 2120 TTAGGAAACTTGTAGAA 2136  
|||||

Db 2 TTAAGAAACATGTAGAA 18  
  
RESULT 4694  
AAD46658  
ID AAD46658 standard; DNA; 20 BP.  
XX  
AC AAD46658;  
XX  
DT 27-JAN-2003 (first entry)  
XX  
DE Human ABCC11 exon25/intron25 junction site.  
XX  
KW ABCC11 protein; paroxysmal kinesigenic choreoathetosis; inflammation;  
KW cholesterol transport; gene therapy; human; ds.  
XX  
OS Homo sapiens.  
XX  
FH Key Location/Qualifiers  
FT exon 1. .10  
FT /\*tag= a  
FT /number= 1  
FT /note= "partial"  
FT intron 11. .20  
FT /\*tag= b  
FT /number= 1  
FT /note= "partial"  
XX  
PN WO200272632-A2.  
XX  
PD 19-SEP-2002.  
XX  
PF 05-MAR-2002; 2002WO-EP003241.  
XX  
PR 05-MAR-2001; 2001US-0272757P.  
XX  
PA (AVET ) AVENTIS PHARMA SA.  
PA (USSH ) US DEPT HEALTH & HUMAN SERVICES.  
XX  
PI Rosier-Montus M, Prades C, Arnould-Reguigne I, Dean M;  
PI Allikmets R, Deneffe P;  
XX  
DR WPI; 2002-723321/78.  
XX  
PT New ABCC11 nucleic acids and proteins, useful in manufacturing a  
PT medicament for treating and/or preventing paroxysmal kinesigenic  
PT choreoathetosis, or pathologies linked to the transport of lipophilic  
PT substances.  
XX  
PS Disclosure; Page 43; 118pp; English.  
XX  
CC The invention relates to novel ABCC11 nucleic acids and proteins. ABCC11  
CC sequences are used in the manufacture of a medicament for treating and/or  
CC preventing subjects affected by paroxysmal kinesigenic choreoathetosis.  
CC They may be used for treating or preventing subjects affected by a  
CC dysfunction of the transport of anionic drugs such as methotrexate, or  
CC neutral drugs conjugated to acidic ligands such as GSH, glucuronate, or  
CC sulphate conjugated drugs. Compositions comprising the ABCC11 polypeptide  
CC may also be used in the treatment and/or prevention of a deficiency in  
CC the transport of cholesterol or inflammatory lipid substances and  
CC diseases mapped on the chromosome locus 16q12. ABCC11 protein can be used  
CC to treat pathologies linked to the transport of lipophilic substances.  
CC The invention is used in gene therapy. The present sequence is human  
CC ABCC11 exon/intron junction site  
XX  
SQ Sequence 20 BP; 5 A; 5 C; 7 G; 3 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 2648 GAACCCCTAAGGTGAGTG 2664  
|||||

```

Query Match          0.5%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 4.3e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1062 TGACTCTCCTGACATCC 1078
DB 2 TCACTCTCTCCTCACATCC 18
      |||||
      |||||

RESULT 4696
ABS52754
ID ABS52754 standard; DNA; 20 BP.
XX AC
XX AC
XX AC
XX AC
DT 15-NOV-2002 (first entry)
XX
DE Ferrocene-type polycyclic hydrocarbon derivative related DNA #1.
XX
DE Ferrocene-type polycyclic hydrocarbon derivative; ss; human;
KW gene therapy; ferrocene-type naphthalenediimide derivative.
KW
XX
OS Homo sapiens.
XX
XX WO200253571-A1.
PN
XX
XX 11-JUL-2002.
PD
XX
XX 28-DEC-2001; 2001WO-JP011653.
PF
XX
XX 28-DEC-2000; 2000JP-00402076.
PR
XX
XX (TUM3-) TUM GENE INC.
PA
PA (TAK3/) TAKENAKA S.
XX
XX Takezaka S, Takamiya H, Takagi M;
PI
XX
XX WPI; 2002-636495/68.
DR
XX
XX Ferrocene-type polycyclic hydrocarbon derivatives including ferrocene-
PT type naphthalenediimide derivatives, useful in gene diagnosis and
PT therapy.
PT
XX
PS Disclosure; Page 18; 45pp; Japanese.
XX
XX The invention relates to ferrocene-type polycyclic hydrocarbon
CC derivatives and also ferrocene-type naphthalenediimide derivatives. The
CC compounds are applicable as intercalators for nucleic acid bases to be
CC used in gene diagnosis and therapy. Such compounds can be easily
CC separated and purified after completion of their synthesis. This sequence
CC represents a ferrocene-type polycyclic hydrocarbon derivative related
CC oligonucleotide
XX
SQ Sequence 20 BP; 3 A; 6 C; 10 G; 1 T; 0 U; 0 Other;

Query Match          0.5%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 4.3e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 219 GCCACGACGGGACGACG 235
DB 2 GCCACGACGGGACGACG 18
      |||||
      |||||

RESULT 4697
ABS52755/c
ID ABS52755 standard; DNA; 20 BP.
XX AC
XX AC
XX AC
XX AC
DT 15-NOV-2002 (first entry)
XX

```

DE Ferrocene-type polycyclic hydrocarbon derivative related DNA #2.  
XX  
KW Ferrocene-type polycyclic hydrocarbon derivative; ss; human;  
KW gene therapy; ferrocene-type naphthalenediimide derivative.  
XX  
OS Homo sapiens.  
XX  
PN WO200253571-A1.  
XX  
PD 11-JUL-2002.  
XX  
XX 28-DEC-2001; 2001WO-JP011653.  
PF  
XX  
PR 28-DEC-2000; 2000JP-00402076.  
XX  
XX (TUMG-) TUM GENE INC.  
PA (TAKE/) TAKENAKA S.  
PA  
XX  
PI Takenaka S, Takamiya H, Takagi M;  
XX  
DR WPI; 2002-636495/68.  
XX  
XX Ferrocene-type polycyclic hydrocarbon derivatives including ferrocene-  
PT type naphthalenediimide derivatives, useful in gene diagnosis and  
PT therapy.  
XX  
PS Disclosure; Page 18; 45pp; Japanese.  
XX  
XX The invention relates to ferrocene-type polycyclic hydrocarbon  
CC derivatives and also ferrocene-type naphthalenediimide derivatives. The  
CC compounds are applicable as intercalators for nucleic acid bases to be  
CC used in gene diagnosis and therapy. Such compounds can be easily  
CC separated and purified after completion of their synthesis. This sequence  
CC represents a ferrocene-type polycyclic hydrocarbon derivative related  
CC oligonucleotide  
XX  
SQ Sequence 20 BP; 1 A; 10 C; 6 G; 3 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 219 GCCACGACGGGAGCAGC 235  
Db 19 GCCACGCGGGGAGCAGC 3  
  
RESULT 4698  
AAS97619/c  
ID AAS97619 standard; DNA; 20 BP.  
XX  
AC AAS97619;  
XX  
DT 12-MAR-2002 (first entry)  
XX  
DE Murine SAC1 gene-specific oligonucleotide PCR primer #224.  
DE  
XX Human; mouse; SAC1; carbohydrate; sweetener; ethanol; alcoholism; ss;  
KW obesity; diabetes; transgenic embryo; body tissue; body fluid; pancreas;  
KW blood; tongue; PCR primer; anorectic; antidiabetic; gene therapy;  
KW protein replacement therapy.  
XX  
OS Mus sp.  
XX  
PN WO200183749-A2.  
XX  
PD 08-NOV-2001.  
XX  
PF 25-APR-2001; 2001WO-US013387.  
XX  
PR 28-APR-2000; 2000US-0200794P.  
PR 28-JUL-2000; 2000US-0221419P.  
PR 10-NOV-2000; 2000US-0247443P.

XX (WARN ) WARNER LAMBERT CO.  
PA (MONE-) MONELL CHEM SENSES CENT.  
XX  
PI Bachmanov AA, Beauchamp GK; Chatterjee A, De Jong PJ, Li S, Li X;  
PI Ohmen JD, Reed DR, Ross D, Tordoff MG;  
XX  
DR WPI; 2002-075162/10.  
XX  
PT Novel isolated polypeptide comprising variant form of mouse or human SAC1  
PT polypeptide, and is associated with altered preference for carbohydrates  
PT or other sweeteners, useful for preventing obesity, diabetes, alcoholism.  
XX  
XX Claim 14; Page 82; 239pp; English.  
XX  
CC The invention relates to an isolated polypeptide, comprising a variant  
CC form of mouse or human SAC1 polypeptide. The variant form is associated  
CC with altered preference for carbohydrates, other sweeteners or ethanol.  
CC The polypeptide and its associated DNA sequence can be produced by  
CC recombinant techniques and is useful for preventing obesity, diabetes or  
CC alcoholism associated with SAC1 expression. The sequences are useful in  
CC screening for drugs and sweeteners. Recombinant cell lines and transgenic  
CC embryos may be used in screening for and identifying agents that induce  
CC or repress function of SAC1. Predisposition to diabetes, obesity or  
CC alcoholism can be ascertained by testing any fluid or tissue of a human  
CC (such as blood, pancreas or tongue) for sequence variations of the SAC1  
CC gene. A sequence variation of the SAC1 locus may indicate a  
CC predisposition to diabetes, obesity and/or alcoholism and may provide a  
CC diagnostic mark. The polynucleotide can be detected in a biological  
CC sample by contacting the DNA with a probe to form a hybridisation complex  
CC which is then detected. The sequences represent cDNA encoding human and  
CC mouse SAC1 polypeptides and PCR primers specific for the SAC1 genes  
XX  
SQ Sequence 20 BP; 3 A; 4 C; 7 G; 6 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 820 GAACCCCACTGAGGTCT 836  
Db 17 GAACCCCACTGAGGTCT 1  
  
RESULT 4699  
ABN89247  
ID ABN89247 standard; DNA; 20 BP.  
XX  
AC ABN89247;  
XX  
DT 29-AUG-2002 (first entry)  
XX  
DE Human Talin antisense phosphorothioate oligonucleotide SEQ ID NO:60.  
XX  
KW Human; Talin; antimicrobial; antiinflammatory; cytostatic; inhibitor;  
KW antisense gene therapy; infection; inflammation; Talin inhibitor; tumour;  
KW antisense oligonucleotide; phosphorothioate; ss.  
XX  
OS Homo sapiens.  
XX  
FH Key Location/Qualifiers  
FT modified\_base 1..20  
FT /\*tag= b  
FT /mod\_base= OTHER  
FT /note= "phosphorothioate backbone"  
FT modified\_base 1..5  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"  
FT modified\_base 16..20  
FT /\*tag= c  
FT /mod\_base= OTHER  
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"



XX US6372492-B1.  
PN  
XX  
XX  
PD 16-APR-2002.  
XX  
XX  
PF 30-OCT-2000; 2000US-00702251.  
XX  
XX 30-OCT-2000; 2000US-00702251.  
PR  
XX (ISIS-) ISIS PHARM INC.  
PA  
XX Bennett CF, Cowsert LM;  
XX  
XX WPI; 2002-470102/50.  
DR  
XX  
XX  
PT New antisense compound useful for inhibiting expression of Talin and for  
PT preventing or delaying infection, inflammation or tumor formation.  
XX  
XX Claim 14; Col 41; 46pp; English.  
XX  
CC The present invention describes an antisense compound (I), 16 to 30 bases  
CC in length targeted to specific base regions of a nucleic acid encoding  
CC human Talin. Also described: (a) an antisense compound up to 30 bases in  
CC length which inhibits the expression of human Talin; (b) a composition  
CC (II) comprising (I) or (a); and (c) inhibiting the expression of human  
CC Talin in human cells or tissues comprising contacting the cells or  
CC tissues in vitro with (I) or (a). (I) has antimicrobial, antiinflammatory  
CC and cytostatic activities, and can be used in antisense gene therapy and  
CC as a Talin expression inhibitor. (I) can be used: to inhibit the  
CC expression of human Talin in human cells or tissues; to prevent or delay  
CC infection, inflammation or tumor formation; and in diagnostics,  
CC therapeutics, prophylaxis, and in research reagents and kits. The present  
CC sequence represents a human Talin antisense chimeric phosphorothioate  
CC oligonucleotide, having 2'-methoxyethyl (2'-MOE) wings of 5 nucleotides  
CC at the 5' and 3' ends and a 10 nucleotide deoxy gap in the middle, which  
CC is used in an example from the present invention  
XX  
SQ Sequence 20 BP; 4 A; 8 C; 6 G; 2 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 429 ACCCCCTGCACCGCCG 445  
Db 3 ACGCCCTGCACCGAGCAG 19  
  
RESULT 4700  
ABS77655  
ID ABS77655 standard; DNA; 20 BP.  
XX  
AC ABS77655;  
XX  
DT 13-DEC-2002 (first entry)  
XX  
DE Angiogenesis inhibitory oligonucleotide #139.  
XX  
KW Angiogenesis inhibitor; ss; angiogenesis; solid tumour growth;  
KW tumour metastasis; precancerous lesion; rheumatoid arthritis; psoriasis;  
KW diabetic retinopathy; retinopathy of prematurity; macular degeneration;  
KW corneal graft rejection; neovascular glaucoma; retrolental fibroplasia;  
KW rubeosis; Osler-Webber Syndrome; myocardial angiogenesis;  
KW plaque neovascularisation; telangiectasia; haemophilic joint;  
KW angiofibroma; wound granulation; intestinal adhesion; atherosclerosis;  
KW scleroderma; hypertrophic scar.  
XX  
OS Synthetic.  
XX  
PN WO200253141-A2.  
XX  
PD 11-JUL-2002.  
XX

PF 14-DEC-2001; 2001WO-US048458.  
XX  
PR 14-DEC-2000; 2000US-0255534P.  
XX  
PA (COLE-) COLEY PHARM GROUP INC.  
XX  
PI Bratzler RL;  
XX  
DR WPI; 2002-566690/60.  
XX  
PT Inhibiting angiogenesis in a subject, involves administering at least one  
PT antiangiogenic nucleic acid molecule to the subject.  
XX  
PS Claim 2; Page 22; 276pp; English.  
XX  
CC The invention relates to inhibiting angiogenesis in a subject, comprising  
CC administering at least one antiangiogenic nucleic acid molecule. Also  
CC included is a kit comprising a first container housing the antiangiogenic  
CC nucleic acids, and instructions for administering them to a subject  
CC having a condition characterised by unwanted angiogenesis. The method is  
CC useful for inhibiting angiogenesis associated with solid tumour growth,  
CC tumour metastasis, precancerous lesion, rheumatoid arthritis, psoriasis,  
CC diabetic retinopathy, retinopathy of prematurity, macular degeneration,  
CC corneal graft rejection, neovascular glaucoma, retrolental fibroplasia,  
CC rubeosis, Osler-Webber Syndrome, myocardial angiogenesis, plaque  
CC neovascularisation, telangiectasia, haemophilic joints, angiofibroma,  
CC wound granulation, intestinal adhesions, atherosclerosis, scleroderma and  
CC hypertrophic scars. The present sequence is an antiangiogenic nucleic  
CC acid of the invention  
XX  
SQ Sequence 20 BP; 0 A; 10 C; 10 G; 0 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 520 CGGGCGCGCCGGCGGCC 536  
Db 2 CGGGCGCGCCGGCGGCC 18  
  
RESULT 4701  
ABS77655/c  
ID ABS77655 standard; DNA; 20 BP.  
XX  
AC ABS77655;  
XX  
DT 13-DEC-2002 (first entry)  
XX  
DE Angiogenesis inhibitory oligonucleotide #139.  
XX  
KW Angiogenesis inhibitor; ss; angiogenesis; solid tumour growth;  
KW tumour metastasis; precancerous lesion; rheumatoid arthritis; psoriasis;  
KW diabetic retinopathy; retinopathy of prematurity; macular degeneration;  
KW corneal graft rejection; neovascular glaucoma; retrolental fibroplasia;  
KW rubeosis; Osler-Webber Syndrome; myocardial angiogenesis;  
KW plaque neovascularisation; telangiectasia; haemophilic joint;  
KW angiofibroma; wound granulation; intestinal adhesion; atherosclerosis;  
KW scleroderma; hypertrophic scar.  
XX  
OS Synthetic.  
XX  
PN WO200253141-A2.  
XX  
PD 11-JUL-2002.  
XX  
PF 14-DEC-2001; 2001WO-US048458.  
XX  
PR 14-DEC-2000; 2000US-0255534P.  
XX  
PA (COLE-) COLEY PHARM GROUP INC.  
XX  
PI Bratzler RL;

XX WPI; 2002-566690/60.

XX Inhibiting angiogenesis in a subject, involves administering at least one

PT antiangiogenic nucleic acid molecule to the subject.

XX

PS Claim 2; Page 22; 276pp; English.

XX

CC The invention relates to inhibiting angiogenesis in a subject, comprising

CC administering at least one antiangiogenic nucleic acid molecule. Also

CC included is a kit comprising a first container housing the antiangiogenic

CC nucleic acids, and instructions for administering them to a subject

CC having a condition characterised by unwanted angiogenesis. The method is

CC useful for inhibiting angiogenesis associated with solid tumour growth,

CC tumour metastasis, precancerous lesion, rheumatoid arthritis, psoriasis,

CC diabetic retinopathy, retinopathy of prematurity, macular degeneration,

CC corneal graft rejection, neovascular glaucoma, retrolental fibroplasia,

CC rubeosis, Osler-Webber Syndrome, myocardial angiogenesis, plaque

CC neovascularisation, telangiectasia, haemophilic joints, angiofibroma,

CC wound granulation, intestinal adhesions, atherosclerosis, scleroderma and

CC hypertrophic scars. The present sequence is an antiangiogenic nucleic

CC acid of the invention

XX

SQ Sequence 20 BP; 0 A; 10 C; 10 G; 0 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 20;

Best Local Similarity 88.2%; Pred. No. 4.3e+03;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 520 CGGCGCGCCGCGCGCC 536

Db 19 CGGCGCGCGCGCGCGCC 3

RESULT 4702

ABT07491/c

ID ABT07491 standard; DNA; 20 BP.

XX

AC ABT07491;

XX

DT 14-NOV-2002 (first entry)

XX

DE Rat protein phosphatase 2 oligo inhibitor SEQ ID No 105.

XX

KW Cytostatic; antidiabetic; antisense therapy; aberrant insulin regulation;

KW protein phosphatase 2 catalytic beta subunit; antisense compound; cancer;

KW hyperproliferative disorder; diabetes; inflammation; tumour; rat; ds.

XX

OS Rattus norvegicus.

XX

PN WO200264737-A2.

XX

PD 22-AUG-2002.

XX

PF 31-JAN-2002; 2002WO-US002805.

XX

PR 09-FEB-2001; 2001US-00780045.

XX

PA (ISIS-) ISIS PHARM INC.

XX

PI Monia BP, Wyatt JR;

XX

DR WPI; 2002-657588/70.

XX

XX

PT New antisense oligonucleotides targeted to nucleic acid encoding Protein

PT Phosphatase 2 catalytic subunit beta, useful for treating diseases

PT related to Protein Phosphatase 2 catalytic subunit beta expression, such

PT as cancer.

XX

PS Example 16; Page 98; 137pp; English.

XX

CC The invention relates to a novel compound 8-50 nucleotides in length

CC targeted to a nucleic acid molecule encoding a protein phosphatase 2

CC catalytic beta subunit, where the compound specifically hybridises with

CC and inhibits the expression of protein phosphatase 2 catalytic beta

CC subunits, or specifically hybridises with at least an 8-nucleotide

CC portion of an active site on a nucleic acid molecule encoding a protein

CC phosphatase 2 catalytic beta subunit. The antisense compounds are useful

CC for modulating the expression of protein phosphatase 2 catalytic beta

CC subunits and for treating diseases or conditions associated with

CC expression of protein phosphatase 2 catalytic beta subunits, e.g.

CC aberrant insulin regulation or diabetes or a hyperproliferative disorder,

CC particularly cancer. The antisense compounds are also useful for

CC diagnostics, therapeutics, prophylaxis, e.g. to prevent or delay

CC infection, inflammation or tumour formation, as research reagents and

CC kits, and in distinguishing between functions of various members of a

CC biological pathway. This polynucleotide sequence represents an

CC oligonucleotide inhibitor of rat protein phosphatase 2 catalytic beta

CC subunit mRNA levels of the invention. NOTE: This oligonucleotide contains

CC phosphorothioate residues and has 2'-MOE wings with a deoxy gap

XX

SQ Sequence 20 BP; 0 A; 15 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 20;

Best Local Similarity 88.2%; Pred. No. 4.3e+03;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 53 GCGCGGGCGCGCGCAG 69

Db 20 GCGCGGGGAGCGCGCG 4

RESULT 4703

ABL38801

ID ABL38801 standard; DNA; 20 BP.

XX

AC ABL38801;

XX

DT 16-APR-2002 (first entry)

XX

DE Immunostimulatory nucleic acid SEQ ID NO: 178.

XX

KW Antibody-induced cell lysis; cancer; immunostimulatory; CD20;

KW angiogenesis; metastasis; cytostatic; ss.

XX

OS Synthetic.

XX

PN WO200197843-A2.

XX

PD 27-DEC-2001.

XX

PF 22-JUN-2001; 2001WO-US020154.

XX

PR 22-JUN-2000; 2000US-0213346P.

XX

PA (IOWA ) UNIV IOWA RES FOUND.

XX

PI Weiner G, Hartmann G;

XX

DR WPI; 2002-154611/20.

XX

XX

PT Treating or preventing cancer, such as basal cell carcinoma, comprises

PT administering immunostimulatory nucleic acids that induce expression of

PT cell surface antigens and antibodies to a subject having or at risk of

PT developing cancer.

XX

PS Disclosure; Page 141; 312pp; English.

XX

CC The present invention relates to methods for treating or preventing

CC cancer, involving administering to a subject having or at risk of

CC developing cancer immunostimulatory nucleic acids that induce expression

CC of cell surface antigens and antibodies. The methods are useful for

CC treating or preventing cancer such as basal cell carcinoma, bladder

CC cancer, bone cancer, brain and central nervous system (CNS) cancer,

CC breast cancer, cervical cancer, colon and rectum cancer, connective

CC tissue cancer, oesophageal cancer, eye cancer, kidney cancer, larynx

CC cancer, leukaemia, liver cancer, lung cancer, Hodgkin's lymphoma, non-  
CC Hodgkin's lymphoma, melanoma, myeloma, oral cavity cancer, ovarian  
CC cancer, pancreatic cancer, prostate cancer, rhabdomyosarcoma, skin  
CC cancer, stomach cancer, testicular cancer, and uterine cancer. The  
CC present sequence is an immunostimulatory oligonucleotide described in the  
CC exemplification of the invention  
XX  
SQ Sequence 20 BP; 0 A; 10 C; 10 G; 0 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 520 CGGGCGCCCGCGCGCC 536  
Db 2 CGGGCGCCCGCGCGCC 18  
  
RESULT 4704  
ABL38801/C  
ID ABL38801 standard; DNA; 20 BP.  
XX  
AC ABL38801;  
XX  
DT 16-APR-2002 (first entry)  
XX  
DE Immunostimulatory nucleic acid SEQ ID NO: 178.  
XX  
KW Antibody-induced cell lysis; cancer; immunostimulatory; CD20;  
KW angiogenesis; metastasis; cytostatic; ss.  
XX  
OS Synthetic.  
XX  
PN WO200197843-A2.  
XX  
PD 27-DEC-2001.  
XX  
PF 22-JUN-2001; 2001WO-US020154.  
XX  
PR 22-JUN-2000; 2000US-0213346P.  
XX  
PA (IOWA ) UNIV IOWA RES FOUND.  
XX  
PI Weiner G, Hartmann G;  
XX  
DR WPI; 2002-154611/20.  
XX  
PT Treating or preventing cancer, such as basal cell carcinoma, comprises  
PT administering immunostimulatory nucleic acids that induce expression of  
PT cell surface antigens and antibodies to a subject having or at risk of  
PT developing cancer.  
XX  
PS Disclosure; Page 141; 312pp; English.  
XX  
CC The present invention relates to methods for treating or preventing  
CC cancer, involving administering to a subject having or at risk of  
CC developing cancer immunostimulatory nucleic acids that induce expression  
CC of cell surface antigens and antibodies. The methods are useful for  
CC treating or preventing cancer such as basal cell carcinoma, bladder  
CC cancer, bone cancer, brain and central nervous system (CNS) cancer,  
CC breast cancer, cervical cancer, colon and rectum cancer, connective  
CC tissue cancer, oesophageal cancer, eye cancer, kidney cancer, larynx  
CC cancer, leukaemia, liver cancer, lung cancer, Hodgkin's lymphoma, non-  
CC Hodgkin's lymphoma, melanoma, myeloma, oral cavity cancer, ovarian  
CC cancer, pancreatic cancer, prostate cancer, rhabdomyosarcoma, skin  
CC cancer, stomach cancer, testicular cancer, and uterine cancer. The  
CC present sequence is an immunostimulatory oligonucleotide described in the  
CC exemplification of the invention  
XX  
SQ Sequence 20 BP; 0 A; 10 C; 10 G; 0 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 520 CGGGCGCCCGCGCGCC 536  
Db 19 CGGGCGCCCGCGCGCC 3  
  
RESULT 4705  
ABL59017  
ID ABL59017 standard; DNA; 20 BP.  
XX  
AC ABL59017;  
XX  
DT 20-AUG-2002 (first entry)  
XX  
DE Nucleotide sequence of a human aurora 2 kinase inhibitor sas03.  
XX  
KW Aurora 2 kinase; aurora 2 kinase inhibitor; cancer; ss.  
XX  
OS Homo sapiens.  
XX  
PN JP2002095479-A.  
XX  
PD 02-APR-2002.  
XX  
PF 22-SEP-2000; 2000JP-00287928.  
XX  
PR 22-SEP-2000; 2000JP-00287928.  
XX  
PA (TANB ) TT PHARM INC.  
XX  
DR WPI; 2002-439988/47.  
XX  
PT New oligonucleotide targets and inhibits human aurora 2 kinase mRNA.  
XX  
PS Disclosure; Fig 1; 12pp; Japanese.  
XX  
CC The present sequence represents an oligonucleotide which targets  
CC polynucleotides encoding human aurora 2 kinase. The oligonucleotide  
CC inhibits aurora 2 kinase expression. The oligonucleotide is useful in the  
CC diagnosis and treatment of cancers  
XX  
SQ Sequence 20 BP; 3 A; 12 C; 3 G; 2 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 595 CGGGCGCTCCGACCTGC 611  
Db 3 CGGGCACTCCGACCAGC 19  
  
RESULT 4706  
ABQ92966/C  
ID ABQ92966 standard; DNA; 20 BP.  
XX  
AC ABQ92966;  
XX  
DT 29-AUG-2003 (revised)  
DT 21-OCT-2002 (first entry)  
XX  
DE T. tauschii/wheat D genome microsatellite cfd49 left PCR primer.  
XX  
KW Microsatellite marker; wheat; D genome; mapping; genotyping;  
KW polymorphism; phenotypic trait; QTL; quantitative trait locus;  
KW disease-associated gene; development factor; quality factor;  
KW resistance factor; wheat product; identification; detection;  
KW genetically modified wheat; PCR; primer; ss.  
XX  
OS Aegilops tauschii.  
OS Triticum aestivum.  
XX

PN EP1217079-A1.  
XX  
PD 26-JUN-2002.  
XX  
PF 22-DEC-2000; 2000EP-00403659.  
XX  
PR 22-DEC-2000; 2000EP-00403659.  
XX  
PA (INRG ) INRA INST NAT RECH AGRONOMIQUE.  
XX  
PI Bernard M, Sourdille P, Guyomarch H;  
XX  
XX WPI; 2002-550410/59.  
PT Map of wheat D genome comprising the genome location of a microsatellite  
PT marker, useful for e.g. identifying genes responsible for a desired  
PT phenotypic trait, especially quantitative trait loci in wheat, and  
PT diseases.  
XX  
PS Claim 4; Page 5; 105pp; English.  
XX  
CC The invention relates to a map of the bread wheat D genome comprising the  
CC genome location of a microsatellite marker selected from a group of 185  
CC such markers (ABQ92733-ABQ92917). The invention also encompasses the use  
CC of left (ABQ92918-ABQ93102) and right (ABQ93103-ABQ93287) primers to  
CC amplify and detect the microsatellite markers, and to identify genes  
CC responsible for a phenotypic trait of interest in wheat. Wheat is an  
CC allohexaploid species consisting of 3 diploid genomes designated A, B and  
CC D, resulting from two successive intercrossings involving at least three  
CC different species. The D genome is thought to have been introduced in the  
CC most recent intercrossing, between the amphiploid AABB and Triticum  
CC tauschii (DD), probably involving only a limited number of genotypes of  
CC both species. Due to its polyploid genome, the large size of its genome,  
CC and its low level of polymorphism, the genetic mapping of wheat has to  
CC date been difficult. Microsatellites are tandemly repeated sequences  
CC between one and six nucleotides long, and are very polymorphic in length,  
CC mainly due to polymerase slippage during replication. This high degree of  
CC polymorphism makes them especially suitable for the genetic mapping of  
CC species which show little intraspecies polymorphism, such as wheat. In  
CC addition, microsatellites are codominant, and exhibit Mendelian  
CC inheritance. The 185 microsatellite markers of the invention are  
CC developed from the ancestral diploid donor species Triticum tauschii and  
CC map to the wheat D genome, which is less polymorphic than the A or B  
CC genomes. These microsatellite markers thus help to overcome some of the  
CC problems associated with the genetic mapping of wheat. The wheat D genome  
CC map and the microsatellite markers and associated primers of the  
CC invention are useful for identifying genes responsible for a phenotypic  
CC trait of interest, most notably QTLs (quantitative trait loci). In  
CC particular they may be used for analysing genes and alleles implicated in  
CC disease and for identifying development factors, quality factors and  
CC factors conferring resistance to pathogens and xenobiotics. The  
CC microsatellite markers, and associated primers may be also be used in  
CC mapping and genotyping diploid and polyploid species of Triticum,  
CC particularly Aegilops, Triticum monococcum, Triticum durum, Triticum  
CC aestivum, or related species; for identifying cultivars and hybrids of  
CC Triticum and related species; to assess whether or not a product  
CC comprises wheat or a related species; and to assess whether or not a  
CC product comprises genetically modified wheat. The present sequence  
CC represents a specifically claimed Triticum tauschii/wheat genome D  
CC microsatellite marker left PCR primer of the invention. (Updated on 29-  
CC AUG-2003 to standardise OS field)  
XX  
SQ Sequence 20 BP; 3 A; 3 C; 7 G; 7 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 675 TGCCTCACCAGATGGAC 691  
|||||  
DB 20 TGCCTCACCAGAGAAC 4

RESULT 4707  
ABN99676/c  
ID ABN99676 standard; DNA; 20 BP.  
XX  
AC ABN99676;  
XX  
DT 16-AUG-2002 (first entry)  
XX  
DE Human clusterin inhibiting antisense oligonucleotide 10.  
XX  
KW Human; antisense inhibition; antisense oligonucleotide; clusterin;  
KW hypercholesterolaemia; cardiovascular disorder; ss;  
KW hyperproliferative disorder; hyperlipidemic disorder;  
KW phosphorothioate backbone; 2'-O-methoxyethyl wing.  
XX  
OS Homo sapiens.  
XX  
PN WO200222635-A1.  
XX  
PD 21-MAR-2002.  
XX  
PF 10-SEP-2001; 2001WO-US028235.  
XX  
PR 11-SEP-2000; 2000US-00659791.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Monia BP, Freier SM;  
XX  
DR WPI; 2002-404805/43.  
XX  
PT Novel antisense compound targeted to nucleic acid molecule encoding  
PT clusterin, useful for treating animal having disease associated with  
PT clusterin such as hyperlipidemic disorder, cardiovascular disorder.  
XX  
PS Claim 3; Page 83; 125pp; English.  
XX  
CC The invention comprises antisense oligonucleotides that are capable of  
CC inhibiting expression of the human clusterin gene. The antisense  
CC oligonucleotides of the invention are useful for inhibiting the  
CC expression of clusterin in cells. The antisense oligonucleotides are also  
CC useful for treating an animal with a disease or condition associated with  
CC clusterin (e.g. hypercholesterolaemia; cardiovascular disorders;  
CC hyperproliferative disorders; and hyperlipidemic disorders). The present  
CC DNA sequence represents a clusterin antisense oligonucleotide of the  
CC invention. NOTE: The present DNA sequence has a phosphorothioate backbone  
CC and also contains 2'-O-methoxyethyl wings  
XX  
SQ Sequence 20 BP; 1 A; 7 C; 3 G; 9 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 2545 AAGAATTAAGAGGATGC 2561  
|||||  
DB 19 AAGAAGAAAGAGGATGC 3  
RESULT 4708  
ABA89809/c  
ID ABA89809 standard; DNA; 20 BP.  
XX  
AC ABA89809;  
XX  
DT 11-FEB-2002 (first entry)  
XX  
DE Human oestrogen receptor 2 exon-intron boundary 5' splice donor #5.  
XX  
KW Human; oestrogen receptor alpha; ESR-alpha; ER; chromosome 6; Syne-2;  
KW synaptic nuclei expressed gene 2; haplotype; cytosstatic; osteopathic;  
KW cardiant; vasotropic; gene therapy; vaccine; cancer; osteoporosis;  
KW cardiovascular disease; oestrogen receptor; ds.



XX OS Homo sapiens.  
XX PN WO200162969-A2.  
XX XX  
XX PD 30-AUG-2001.  
XX XX  
XX PF 20-FEB-2001; 2001WO-US005358.  
XX XX  
XX PR 22-FEB-2000; 2000US-0183756P.  
XX PR 20-OCT-2000; 2000US-00692414.  
XX PR 24-JAN-2001; 2001US-00768184.  
XX PA (PEKE ) PE CORP NY.  
XX XX  
XX PI Kalush F, Cassel MJ, Hwang SS, Winn-Deen ES;  
XX DR WPI; 2002-041152/05.  
XX XX  
PT Novel variant of estrogen receptor alpha polypeptide useful for  
PT determining the biological activity of a protein for high throughput  
PT screening and for raising antibodies that elicit an immune response in  
PT host.  
XX XX  
PS Example; Page 56; 333pp; English.  
XX XX  
CC The present invention describes an isolated peptide (I) consisting of an  
CC amino acid sequence selected from: (a) the amino acid sequence of a  
CC variant of the oestrogen receptor alpha (ESR-alpha) protein in AAG68251;  
CC or (b) a fragment comprising at least 10 contiguous amino acids of the  
CC protein in AAG68251. (I) has cytostatic, osteopathic, cardiant and  
CC vasotropic activities, and can be used in gene therapy and vaccine  
CC production. (I) is useful for identifying an agent that binds to (I), by  
CC contacting (I) with an agent and assaying the contacted mixture to  
CC determine whether a complex is formed with the agent bound to the  
CC peptide. A polynucleotide (II), encoding (I), is useful in the  
CC development of diagnostics and therapies for diseases and disorders  
CC mediated/modulated by an oestrogen receptor (ER). (II) is also useful in  
CC gene therapy for treating cancer, osteoporosis and cardiovascular  
CC diseases. The human ESR-alpha gene is located on chromosome 6. ABA89779  
CC to ABA89828 represent oligonucleotides covering human ER exon-intron  
CC boundaries, and ABA89829 to ABA89868 represent oligonucleotides covering  
CC human synaptic nuclei expressed gene 2 exon-intron boundaries, which are  
CC used in an example from the present invention  
XX XX  
SQ Sequence 20 BP; 2 A; 3 C; 4 G; 11 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 1481 AACAAACCCCTGGAGAA 1497  
Db 19 AACAAACCCCTGTAAAA 3  
  
RESULT 4709  
AAL40388  
ID AAL40388 standard; DNA; 20 BP.  
XX XX  
XX AC AAL40388;  
XX XX  
DT 19-SEP-2002 (first entry)  
XX XX  
DE Mouse caspase 6 antisense inhibition related oligo SEQ ID No 107.  
XX XX  
KW Muscular; cytostatic; nootropic; neuroprotective; ophthalmological;  
KW antilipaemic; osteopathic; caspase 6; Rieger's syndrome; bone metabolism;  
KW ataxia telangiectasia; hyperproliferative disorder; cholesterol disorder;  
KW haematopoietic disorder; cancer; neurological; Alzheimer's disease;  
KW apoptotic; mouse; murine; ds.  
XX OS Mus musculus.

XX WO200229066-A1.  
XX PN  
XX XX  
PD 11-APR-2002.  
XX XX  
XX PF 03-OCT-2001; 2001WO-US030871.  
XX XX  
XX PR 04-OCT-2000; 2000US-00679299.  
XX XX  
XX PA (ISIS-) ISIS PHARM INC.  
XX PI Brown-Driver VL, Zhang H, Watt AT;  
XX DR WPI; 2002-471315/50.  
XX XX  
PT An antisense oligonucleotide of 8 to 50 nucleotides in length that  
PT inhibits caspase 6, is useful for treating Rieger's syndrome.  
XX XX  
PS Claim 3; Page 92; 141pp; English.  
XX XX  
CC The invention relates to an antisense oligonucleotide compound of 8 to 50  
CC nucleotides in length that is targeted to a nucleic acid molecule  
CC encoding caspase 6, where the oligonucleotide specifically hybridises  
CC with and inhibits the expression of caspase 6. The oligonucleotide of the  
CC invention specifically hybridises to and inhibits expression of caspase 6  
CC in cells or tissues. The oligonucleotides can be administered  
CC therapeutically or prophylactically to treat an animal having a disease  
CC or condition associated with caspase 6, such as Rieger's syndrome or  
CC ataxia telangiectasia, hyperproliferative disorder, a haematopoietic  
CC disorder, a bone metabolism or cholesterol disorder, various types of  
CC cancer, neurological conditions such as Alzheimer's disease and other de-  
CC regulated apoptotic pathological conditions. This polynucleotide sequence  
CC represents a mouse caspase 6 oligonucleotide relating to the invention.  
CC NOTE: This phosphorothioate oligonucleotide sequence has 2'-MOE wings and  
CC a deoxy gap  
XX XX  
SQ Sequence 20 BP; 1 A; 8 C; 7 G; 4 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 540 TGCCCCCACCTCTCCGGG 556  
Db 2 TGCCCCGCCTCTCTGGG 18  
  
RESULT 4720  
ABA02214/C  
ID ABA02214 standard; DNA; 20 BP.  
XX XX  
XX AC ABA02214;  
XX XX  
DT 12-FEB-2002 (first entry)  
XX XX  
DE Human/mouse C/EBP phosphorothioate antisense oligonucleotide, SEQ ID:26.  
XX XX  
KW Human; C/EBP alpha; CCAAT/enhancer-binding protein alpha; CEBPA;  
KW transcription factor; tissue development; cellular function;  
KW proliferation; differentiation; adipocyte; energy metabolism;  
KW chondrogenic; ovulation; follicular development;  
KW hepatic steroid-induced cell cycle arrest; GLUT2 promoter regulation;  
KW hormonal metabolic regulation; granulocyte development; cancer;  
KW tumour formation; infection; inflammation; expression inhibition;  
KW antisense therapy; quantitative real-time PCR primer; ss.  
XX XX  
OS Homo sapiens.  
OS Mus musculus.  
XX XX  
XX FT Key Location/Qualifiers  
FT modified\_base 1..20  
FT /\*tag= a  
FT /mod\_base= OTHER

```
FT modified_base /note= "Phosphorothioate linkages"
FT 1. .5
FT /*tag= b
FT /mod_base= OTHER
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides. All 2' MOE
FT cytosines are 5-methylcytosine"
FT 16. .20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides. All 2' MOE
FT cytosines are 5-methylcytosine"
XX
PN US6306655-B1.
XX
XX 23-OCT-2001.
XX
XX 13-JUN-2000; 2000US-00593589.
XX
XX 13-JUN-2000; 2000US-00593589.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Monia BP, Butler MM, Wyatt J;
XX
XX WPI; 2002-040202/05.
XX
PT New antisense oligonucleotides for modulating the expression of
PT CCAAT/Enhancer-binding proteins alpha, particularly useful for
PT preventing, delaying or treating infection, inflammation or tumor
PT formation.
XX
PS Claim 1; Col 42; 44pp; English.
XX
XX Sequences ABA02205-ABA02282 represent antisense oligonucleotides targeted
CC to the human CCAAT/enhancer-binding protein alpha (C/EBP alpha) gene,
CC which inhibit its expression. The antisense oligonucleotides were
CC designed to target different regions of the human C/EBP alpha RNA, and
CC were analysed for their effect on C/EBP alpha mRNA levels by quantitative
CC real-time PCR. A similar investigation on mouse C/EBP alpha expression
CC was performed using a subset of the antisense oligonucleotides that were
CC capable of hybridising to mouse C/EBP alpha mRNA. The C/EBP family of
CC proteins are a family of transcription factors which regulate the
CC expression of wide range of genes that control normal tissue development,
CC cellular function, cellular proliferation and functional differentiation.
CC C/EBP alpha (also known as CEBPA) is primarily found in tissues involved
CC in energy metabolism which have a capacity to metabolise lipids,
CC cholesterol and other sterols. It is thought to be involved in the
CC regulation of adipocyte and chondrogenic differentiation, and is also
CC involved in follicular development and ovulation, steroid-induced cell
CC cycle arrest in the liver, in controlling glucose transporter GLUT2
CC promoter activity, in the hormonal regulation of metabolism, and in
CC granulocyte development. The oligonucleotides of the invention are useful
CC for diagnosis, prevention and treatment of conditions associated with
CC C/EBP expression, such as cancer, tumour formation, infection, or
XX inflammation
SQ Sequence 20 BP; 4 A; 7 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 4.3e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 378 AGTCGGCCGACCCCTAC 394
Db |||||
18 AGTCGGCCGACTTCTAC 2

RESULT 4711
AAD29918/c
ID AAD29918 standard; DNA; 20 BP.
XX
AC AAD29918;
XX
```

```
DT 17-MAY-2002 (first entry)
XX
DE Mouse TID-1 cDNA 5' region amplifying RACE PCR primer #2.
XX
KW Mouse; prostate cancer; calreticulin; TID-1 protein; TRAITS protein;
KW androgen action pathway; cell proliferation; kidney cancer; lymphoma;
KW epithelium-derived carcinoma; leukaemia; vaccine; gene therapy;
KW cytostatic; U19; RACE PCR primer; rapid amplification of cDNA ends; ss.
XX
OS Mus musculus.
XX
PN WO200206327-A2.
XX
XX 24-JAN-2002.
XX
XX 17-JUL-2001; 2001WO-US022357.
XX
XX 17-JUL-2000; 2000US-0218761P.
XX
XX 16-JUL-2001; 2001US-00906393.
XX
PA (NOUN ) UNIV NORTHWESTERN.
XX
XX Wang Z, Xiao W;
XX
XX WPI; 2002-179780/23.
XX
PT Identifying a subject that is likely to have aggressive form of prostate
PT cancer, involves comparing calreticulin levels in prostate specimen of
PT the subject and in benign prostatic epithelial cells of the same subject.
XX
PS Example 3; Page 87; 148pp; English.
XX
XX The present invention relates to methods of distinguishing aggressive
CC forms of prostate cancer from non-aggressive forms. The method involves
CC comparing the level of calreticulin in prostate specimen and in benign
CC prostatic epithelial cells of a subject. The invention particularly
CC relates to two proteins, namely calreticulin and TID-1 (TRAITS; U19) that
CC are down-regulated in aggressive forms of prostate cancer but not in
CC slowly progressing prostate cancer. They play important roles in the part
CC of androgen action pathway that suppresses cell proliferation and/or
CC prevents prostate cancer. The method is useful for identifying a subject
CC who is likely to have an aggressive form of prostate cancer. The
CC invention further relates to a method of identifying a subject with a
CC slow growing form of prostate cancer. TID-1 sequences are useful for
CC treating cancers such as epithelium-derived carcinomas, kidney cancers,
CC lymphomas, leukaemias and prostate cancers. Sequences of the invention
CC are used as vaccines and in gene therapy. The present DNA sequence is a
CC RACE (rapid amplification of cDNA ends) PCR primer which is used for
CC amplifying the 5' region of mouse TID-1 cDNA
XX
SQ Sequence 20 BP; 6 A; 5 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 4.3e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2318 TGTTCGCTGCTTGTCACC 2334
Db |||||
18 TGATGCTACTTGTCACC 2

RESULT 4712
ABK94486
ID ABK94486 standard; DNA; 20 BP.
XX
XX AC ABK94486;
XX
XX 27-AUG-2002 (first entry)
XX
XX Human BRCA1 gene reverse PCR primer for exon fragment 11.13.
DE hMLH1; DNA mismatch repair; BRCA1; ss; PCR; primer; BRCA1;
XX breast and ovarian cancer susceptibility gene; TGDS; human;
KW
```

KW two-dimensional DNA electrophoresis; tumour suppressor gene;  
KW breast cancer; ovarian cancer; tumour.  
XX  
OS Homo sapiens.  
XX  
XX WO200236819-A1.  
XX  
XX 10-MAY-2002.  
XX  
XX 06-NOV-2000; 2000WO-IB001607.  
XX  
XX 06-NOV-2000; 2000WO-IB001607.  
XX  
XX (SCSC-) ACAD APPLIED SCI.  
XX  
XX Vijg J;  
XX  
XX WPI; 2002-471507/50.  
XX  
XX Detecting mutations in the BRCA1 and hMLH1 gene comprises subjecting  
XX amplification products to 2-dimensional gel electrophoresis to produce a  
XX characteristic spot pattern for a specific mutation in either the BRCA1  
XX or the hMLH1 gene.  
XX  
XX Claim 1; Page 39; 57pp; English.  
XX  
XX The invention relates to detecting mutations in the BRCA1 and hMLH1 gene  
XX comprising subjecting a set of amplification products to two-dimensional  
XX DNA electrophoresis (TGDS) to produce a characteristic spot pattern for a  
XX specific mutation in either the BRCA1 or the hMLH1 gene. Also included  
XX are test kits for enabling BRCA1 or hMLH1 gene testing comprising short  
XX PCR primers given in the specification, mixed in 20 mM of Tris-HCl, 50 mM  
XX KCl, 25 micro M of dNTP, and 5 % formamide. The method is useful for  
XX detecting mutations in the BRCA1 (breast and ovarian cancer  
XX susceptibility gene, a tumour suppressor gene) and hMLH1 gene (a DNA  
XX mismatch repair gene). The present sequence is a PCR primer specific to  
XX BRCA1 used in the method of the invention  
XX  
XX Sequence 20 BP; 7 A; 2 C; 6 G; 5 T; 0 U; 0 Other;  
XX  
XX Query Match 0.5%; Score 13.8; DB 1; Length 20;  
XX Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
XX Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
XX  
QY 2673 AGTGTGTGGTGAAA 2689  
DB 3 AATGTGATGGTGAAA 19  
XX  
RESULT 4713  
ABS59782  
ID ABS59782 standard; DNA; 20 BP.  
XX  
XX ABS59782;  
XX  
XX 05-NOV-2002 (first entry)  
XX  
XX Human damage specific DNA binding protein 1 antisense oligo #74.  
XX  
XX Antisense; cytostatic; hepatotropic; antiinflammatory; virucide;  
XX Damage-specific DNA-binding protein 1; p127; cancer; human; ss;  
XX hyperproliferative disorder; haematopoietic cancer; hepatitis.  
XX  
XX Homo sapiens.  
XX Synthetic.  
XX  
XX Key Location/Qualifiers  
XX modified\_base 1..20  
XX /\*tag= a  
XX /\*mod\_base= m5c  
XX /\*note= "All cytosines are 5-methyl cytosine"  
XX modified\_base 1..20  
XX /\*tag= c

FT /mod\_base= OTHER  
FT /note= "OTHER= phosphorothioate backbone"  
FT modified\_base 1..5  
FT /\*tag= b  
FT /mod\_base= OTHER  
FT /note= "OTHER= 2'-O-methoxyethyl nucleotide"  
FT modified\_base 16..20  
FT /\*tag= d  
FT /mod\_base= OTHER  
FT /note= "OTHER= 2'-O-methoxyethyl nucleotide"  
XX  
XX WO200246206-A1.  
XX  
XX 13-JUN-2002.  
XX  
XX 04-DEC-2001; 2001WO-US046485.  
XX  
XX 06-DEC-2000; 2000US-00731457.  
XX  
XX (ISIS-) ISIS PHARM INC.  
XX  
XX Popoff I, Wyatt JR;  
XX  
XX WPI; 2002-599454/64.  
XX  
XX Novel antisense compound targeted to nucleic acid molecule encoding  
XX Damage-specific DNA-binding protein 1, p127, useful for treating animal  
XX having disease associated with the protein such as liver cancer, or  
XX hepatitis.  
XX  
XX Page 91; Claim 3; 121pp; English.  
XX  
XX This invention relates to a novel antisense compound 8 to 50 nucleobases  
XX in length targeted to nucleic acid molecule encoding Damage-specific DNA-  
XX binding protein 1, p127 where the antisense compound specifically  
XX hybridises with and inhibits expression of the damage specific DNA  
XX binding protein-1 gene. The compounds of the invention may be used in  
XX antisense therapy as an inhibitor of expression of Damage-specific DNA-  
XX binding protein 1, p127. The antisense compounds of the invention are  
XX useful for inhibiting the expression of damage specific DNA binding  
XX protein 1, p127 in cells or tissues and are also useful for treating an  
XX animal having a disease or condition associated with expression of p127,  
XX such as a hyperproliferative disorder (e.g., cancer such as breast, skin,  
XX liver, or haematopoietic cancer), or hepatitis, by inhibiting the  
XX expression of p127. All antisense oligonucleotides of the invention are  
XX chimeric oligonucleotides (gapmers) 20 nucleotides in length, composed of  
XX a central gap region consisting of ten 2'-deoxynucleotides, which are  
XX flanked on both sides (5' and 3' directions) by five- nucleotide wings.  
XX The wings are composed of 2'-methoxyethyl (2'-MOE) nucleotides. The  
XX internucleoside (backbone) linkages are phosphorothioate (P=S) throughout  
XX the oligonucleotide and all cytidine residues are 5-methylcytidines. The  
XX present sequence represents a damage-specific DNA binding protein 1, p127  
XX antisense oligonucleotide of the invention  
XX  
XX Sequence 20 BP; 2 A; 6 C; 7 G; 5 T; 0 U; 0 Other;  
XX  
XX Query Match 0.5%; Score 13.8; DB 1; Length 20;  
XX Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
XX Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
XX  
QY 1362 GGTTGGCAGCCAGGCC 1378  
DB 2 GGCTGGCAGTCAGGCC 18  
XX  
XX  
XX RESULT 4714  
XX AAD30205  
XX ID AAD30205 standard; DNA; 20 BP.  
XX  
XX AC AAD30205;  
XX  
XX 17-MAY-2002 (first entry)  
XX

DE Human UGT1A6-1 gene fragment polymorphism detecting primer, UGT1A6-R1.  
XX  
KW Human; single nucleotide polymorphism; SNP; diagnosis; pre-disposition;  
KW drug induced liver toxicity; screening; UDP-glucuronosyl transferase;  
KW UGT1; hepatotoxic reaction; sequence identification; drug metabolism;  
KW genotyping; primer; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO200206523-A2.  
XX  
PD 24-JAN-2002.  
XX  
PF 02-JUL-2001; 2001WO-EP007524.  
XX  
XX 14-JUL-2000; 2000EP-00115353.  
PR  
XX (HOFF ) HOFFMANN LA ROCHE & CO AG F.  
PA  
PI , Acuna G, Foernzler D, Leong DU;  
XX  
XX WPI; 2002-179803/23.  
DR  
XX  
PT Detecting predisposition to hepatotoxic reaction of human being caused by  
PT administration of a compound, by determining single nucleotide  
PT polymorphism in UDP-glucuronosyl transferase gene in sample of human  
PT being.  
XX  
PS Example; Page 23; 62pp; English.  
XX  
CC The invention relates to a method for diagnosing a pre-disposition to  
CC drug induced liver toxicity which involves determining at least one single  
CC nucleotide polymorphism (SNP) in the UDP-glucuronosyl transferase (UGT1)  
CC gene. The method is useful for detecting a predisposition to a  
CC hepatotoxic reaction of a human being caused by administration of a  
CC pharmacologically active compound based on determination of a SNP in UGT1  
CC gene in a sample of the human being. Nucleic acids containing  
CC polymorphism are useful for performing sequence identification. They are  
CC also useful in screening assays, to establish animal, cell and in vitro  
CC models for drug metabolism and for genotyping individuals. The present  
CC sequence is a primer used to detect human UGT1A6-1 gene fragment  
CC polymorphism  
XX  
SQ Sequence 20 BP; 6 A; 4 C; 6 G; 4 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 894 CAGTGGCTGAAGTACAG 910  
Db 1 CAGTTGATGAAGTACAG 17  
  
RESULT 4715  
ABA97649/c  
ID ABA97649 standard; DNA; 20 BP.  
XX  
AC ABA97649;  
XX  
DT 11-APR-2002 (first entry)  
XX  
DE probe t.  
XX  
KW ss; fluorochrome; nucleic acid probe; fluorescence.  
XX  
OS Unidentified.  
XX  
PN JP2001286300-A.  
XX  
PD 16-OCT-2001.  
XX  
PF 20-APR-2000; 2000JP-00120097.  
  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 894 CAGTGGCTGAAGTACAG 910  
Db 1 CAGTTGATGAAGTACAG 17  
  
RESULT 4715  
ABA97649/c  
ID ABA97649 standard; DNA; 20 BP.  
XX  
AC ABA97649;  
XX  
DT 11-APR-2002 (first entry)  
XX  
DE probe t.  
XX  
KW ss; fluorochrome; nucleic acid probe; fluorescence.  
XX  
OS Unidentified.  
XX  
PN JP2001286300-A.  
XX  
PD 16-OCT-2001.  
XX  
PF 20-APR-2000; 2000JP-00120097.

XX 20-APR-1999; 99JP-00111601.  
PR 24-AUG-1999; 99JP-00236666.  
PR 30-AUG-1999; 99JP-00242693.  
PR 01-FEB-2000; 2000JP-00028896.  
XX  
PA (BIOI-) BIOINDUSTRY KYOKAI SH.  
PA (KANK-) KANKYO ENG KK.  
PA (KEIZ-) KEIZAI SANGYOSHO SANGYO GIJUTSU SOGO KEN.  
XX  
DR WPI; 2002-134193/18.  
XX  
PT Measurement of nucleic acids, using a nucleic acid probe and analysis of  
PT the obtained data.  
XX  
PS Example 6; Page 18; 34pp; Japanese.  
XX  
CC This invention relates to a method for measuring nucleic acids using a  
CC nucleic acid probe labelled with a fluorochrome. The nucleic acid probe  
CC decreases the fluorescence of the fluorochrome when hybridised with a  
CC target nucleic acid, the decrease in the fluorescence is measured. The  
CC method can be used for measuring a target nucleic acid  
XX  
SQ Sequence 20 BP; 14 A; 0 C; 1 G; 5 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 2519 TTTTATTCATATATATA 2535  
Db 18 TTTTATTCATATATATA 2  
  
RESULT 4716  
ABA97648/c  
ID ABA97648 standard; DNA; 20 BP.  
XX  
AC ABA97648;  
XX  
DT 11-APR-2002 (first entry)  
XX  
DE probe s.  
XX  
KW ss; fluorochrome; nucleic acid probe; fluorescence.  
XX  
OS Unidentified.  
XX  
PN JP2001286300-A.  
XX  
PD 16-OCT-2001.  
XX  
PF 20-APR-2000; 2000JP-00120097.  
XX  
PR 20-APR-1999; 99JP-00111601.  
PR 24-AUG-1999; 99JP-00236666.  
PR 30-AUG-1999; 99JP-00242693.  
PR 01-FEB-2000; 2000JP-00028896.  
XX  
PA (BIOI-) BIOINDUSTRY KYOKAI SH.  
PA (KANK-) KANKYO ENG KK.  
PA (KEIZ-) KEIZAI SANGYOSHO SANGYO GIJUTSU SOGO KEN.  
XX  
DR WPI; 2002-134193/18.  
XX  
PT Measurement of nucleic acids, using a nucleic acid probe and analysis of  
PT the obtained data.  
XX  
PS Example 6; Page 18; 34pp; Japanese.  
XX  
CC This invention relates to a method for measuring nucleic acids using a  
CC nucleic acid probe labelled with a fluorochrome. The nucleic acid probe  
CC decreases the fluorescence of the fluorochrome when hybridised with a



CC target nucleic acid, the decrease in the fluorescence is measured. The  
CC method can be used for measuring a target nucleic acid  
XX  
SQ Sequence 20 BP; 13 A; 0 C; 2 G; 5 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 2519 TTTTATTTCATATATATA 2535  
Db 18 TTTTATTTCATATATATA 2  
RESULT 4717  
ABA97650/C  
ID ABA97650 standard; DNA; 20 BP.  
XX AC ABA97650;  
XX 11-APR-2002 (first entry)  
DT probe u.  
DE ss; fluorochrome; nucleic acid probe; fluorescence.  
XX Unidentified.  
XX JP2001286300-A.  
XX 16-OCT-2001.  
XX 20-APR-2000; 2000JP-00120097.  
XX 20-APR-1999; 99JP-00111601.  
PR 24-AUG-1999; 99JP-00236666.  
PR 30-AUG-1999; 99JP-00242693.  
PR 01-FEB-2000; 2000JP-00028896.  
XX (BIOI-) BIOINDUSTRY KYOKAI SH.  
PA (KANK-) KANKYO ENG KK.  
PA (KEIZ-) KEIZAI SANGYOSHO SANGYO GIJUTSU SOGO KEN.  
XX WPI; 2002-134193/18.  
XX Measurement of nucleic acids, using a nucleic acid probe and analysis of  
PT the obtained data.  
PT  
XX Example 6; Page 18; 34pp; Japanese.  
XX This invention relates to a method for measuring nucleic acids using a  
CC nucleic acid probe labelled with a fluorochrome. The nucleic acid probe  
CC decreases the fluorescence of the fluorochrome when hybridised with a  
CC target nucleic acid, the decrease in the fluorescence is measured. The  
CC method can be used for measuring a target nucleic acid  
XX  
SQ Sequence 20 BP; 15 A; 0 C; 0 G; 5 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 2519 TTTTATTTCATATATATA 2535  
Db 18 TTTTATTTCATATATATA 2  
RESULT 4718  
AAD39347/C  
ID AAD39347 standard; DNA; 20 BP.  
XX AC AAD39347;  
XX

DT 04-OCT-2002 (first entry)  
XX Human Von Willebrand factor-cleaving protease cloning PCR primer, 6395.  
DE  
XX Human; Von Willebrand factor-cleaving protease; vWF-cp; therapy; enzyme;  
KW transgenic animal; immunisation; thromboembolic disease; preeclampsia;  
KW thrombotic thrombocytic purpura; TTP; Henoch-Schonlein purpura;  
KW thrombosis; neonatal thrombocytopaenia; haemolytic-uraemic syndrome;  
KW transgenic; anticoagulant; RT-PCR; primer; ss.  
XX Homo sapiens.  
OS WO200242441-A2.  
XX 30-MAY-2002.  
PD 20-NOV-2001; 2001WO-EP013391.  
XX 22-NOV-2000; 2000US-00721254.  
PR 12-APR-2001; 2001US-00833328.  
XX (BAXT ) BAXTER AG.  
XX Laemmle B, Gerritsen HE, Furlan M, Turecek P, Schwarz H;  
PI Scheiflinger F, Antoine G, Kerschbaumer R, Tagliavacca L;  
PI Zimmermann K, Voelkel D;  
XX WPI; 2002-479950/51.  
DR Novel isolated or substantially purified Von Willebrand factor-cleaving  
XX protease, useful for producing preparation for therapy of thrombosis and  
XX thromboembolic disease such as thrombotic thrombocytic purpura.  
PS Example 3; Page 34; 93pp; English.  
XX The invention relates to an isolated or substantially pure Von Willebrand  
CC factor-cleaving protease (vWF-cp) polypeptide. vWF-cp is useful for  
CC purifying vWF which involves providing vWF-cp as a ligand, contacting a  
CC solution comprising vWF with the polypeptide ligand under conditions  
CC where vWF is bound to the ligand and recovering from the ligand purified  
CC vWF. vWF-cp is useful for producing anti-vWF cp polypeptide antibodies  
CC which involves immunising an animal with vWF-cp and isolating the anti-  
CC vWF cp polypeptide antibodies from the animal. vWF-cp is useful for  
CC producing a preparation of prophylaxis and therapy of thrombosis and  
CC thromboembolic disease such as thrombotic thrombocytic purpura (TTP),  
CC Henoch-Schonlein purpura, preeclampsia, neonatal thrombocytopaenia or  
CC haemolytic-uraemic syndrome. vWF-cp can also be used for processing  
CC plasmatic or recombinantly produced vWF. The invention is useful for  
CC construction expression systems and generating transgenic animals which  
CC express the polypeptide in vivo. The present sequence is human vWF-cp  
CC gene cloning RT-PCR primer  
XX  
SQ Sequence 20 BP; 3 A; 6 C; 8 G; 3 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1591 CTGGGAACCCCTCCTGG 1607  
Db 17 CTGGGGACCCCTCCAGG 1  
RESULT 4719  
ABL94407  
ID ABL94407 standard; DNA; 20 BP.  
XX AC ABL94407;  
XX 29-JUL-2002 (first entry)  
XX Mouse C/EBP beta phosphorothioate antisense oligonucleotide, SEQ ID:173.  
XX

Muscle; murine; C/EBP beta; CCAAT/enhancer-binding protein beta; C/EBP2; LAP; TCF5; CRP2; NFIL6; IL6DBP; NF-M; AGP/EBP; Apc/EBP; transcription factor; tissue development; cellular function; proliferation; differentiation; hormone responsiveness; oxidative stress response; IL-6 signalling mediator; interleukin-6; carbohydrate metabolism; immunity; Th1 response; female fertility; gluconeogenesis; ovarian; cancer; tumour formation; type II; diabetes; infection; inflammation; expression inhibition; phosphorothioate; antisense oligonucleotide; ss.

Mus musculus.

Key Location/Qualifiers  
modified\_base 1..20  
/\*tag= a  
/mod\_base= OTHER  
/note= "Phosphorothioate linkages"  
modified\_base 1..5  
/\*tag= b  
/mod\_base= OTHER  
/note= "2'-methoxyethyl (2'-MOE) nucleotides. All 2' MOE cytosines are 5-methylcytosine"  
modified\_base 16..20  
/\*tag= c  
/mod\_base= OTHER  
/note= "2'-methoxyethyl (2'-MOE) nucleotides. All 2' MOE cytosines are 5-methylcytosine"

US6271030-B1.

07-AUG-2001.

14-JUN-2000; 2000US-00593711.

14-JUN-2000; 2000US-00593711.

(ISIS-) ISIS PHARM INC.

Monia BP, Butler MM, Wyatt J;

WPI; 2002-214451/27.

Novel antisense compound targeted to nucleic acids encoding human or mouse CCAAT/enhancer binding protein (C/EBP) beta, useful in vitro for inhibiting expression of human or mouse C/EBP beta in cells/tissues.

Example 17; Col 51-52; 69pp; English.

Sequences ABL94252-ABL94476 represent antisense oligonucleotides targeted to the human or mouse CCAAT/enhancer-binding protein alpha (C/EBP alpha) gene, which inhibit its expression. The antisense oligonucleotides were designed to target different regions of the human and/or mouse C/EBP alpha RNA, and were analysed for their effect on C/EBP alpha mRNA levels by quantitative real-time PCR. The C/EBP family of proteins are a family of transcription factors which regulate the expression of a wide range of genes that control normal tissue development, cellular function, cellular proliferation and functional differentiation. C/EBP beta (also known as C/EBP2, LAP, TCF5, CRP2, NFIL6, IL6DBP, NF-M, AGP/EBP and Apc/EBP) primarily regulates hormone responsiveness and oxidative stress responses and is a mediator of IL-6 (interleukin-6) signalling. C/EBP beta is thought to be involved in carbohydrate metabolism, immunity, the Th1 response, female fertility and gluconeogenic pathways. C/EBP beta is expressed in the liver, lung, spleen, kidney, brain, and testis, with the highest expression found in the lung. It is also expressed at a higher level in malignant ovarian tissue compared with normal ovarian tissue, and its expression in pancreas is upregulated in response to chronically elevated levels of glucose, indicating that it is involved in the impairment of insulin secretion in type II diabetes. The oligonucleotides of the invention are useful for diagnosis, prevention and treatment of conditions associated with C/EBP beta expression, such as cancer (particularly ovarian cancer), tumour formation, diabetes (particularly type II diabetes), infection, or inflammation

SQ Sequence 20 BP; 2 A; 8 C; 5 G; 5 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 712 CCAGCACCTGTTGCTGC 728  
|||||||  
Db 3 CCAGCACCTGTTGCTGC 19

RESULT 4720

ABI95113

ID ABI95113 standard; DNA; 20 BP.

XX ABI95113;

AC ABI95113;

XX 16-FEB-2002 (first entry)

DT 16-FEB-2002 (first entry)

XX Capture oligonucleotide Zip ID#2200 oligo #9.

DE Human; K-ras; PCR primer; probe; capture probe; mutation detection;

XX ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease;

KW infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer;

KW oncogene; tumour suppressor; human papillomavirus; forensic;

KW environmental monitoring; food industry; feed industry; ss.

XX Synthetic.

OS WO200179548-A2.

XX 25-OCT-2001.

PN 04-APR-2001; 2001WO-US010958.

XX 14-APR-2000; 2000US-0197271P.

PR (CORR ) CORNELL RES FOUND INC.

XX Barany F, Zirvi M, Gerry NP, Favis R, Kliman R;

PI WPI; 2002-034366/04.

XX Designing capture oligonucleotide probes for use on a support to which

PT complementary oligonucleotides hybridize with little mismatch.

XX Example 5; Fig 29; 300pp; English.

CC The present invention describes a method (M1) for designing capture

CC oligonucleotide probes (I) for use on a support to which complementary

CC oligonucleotide probes (II) will hybridize with little mismatch, where

CC (I) have melting temperatures within a narrow range. The method is useful

CC for detecting infectious diseases caused by bacterial infectious agents

CC e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal

CC infectious agents e.g. Cryptococcus neoformans, Candida albicans and

CC Aspergillus fumigatus, viruses e.g. T-cell lymphocytotropic virus,

CC Epstein-Barr virus and polio virus, and parasitic infectious agents

CC selected from Onchocerca volvulus, Entamoeba histolytica and Dracunculus

CC medinensis. The method is also useful for detecting genetic diseases such

CC as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.

CC Detecting cancer involving oncogenes, tumour suppressor genes, or genes

CC involved in DNA amplification, replication, recombination or repair, the

CC cancer is specifically associated with a gene selected from BRCA1 gene,

CC p53 gene, human papillomavirus types 16 and 18 and liver cancers. The

CC method is also used for environmental monitoring, forensics and the food

CC and feed industry, detecting comprises scanning (using e.g. a scanning

CC electron microscope and infrared microscope) the support at the

CC particular sites and identifying if ligation of the oligonucleotide probe

CC sets occurred and correlating (using a computer) identified ligation to a

CC presence or absence of the target nucleotide sequences. ABI82074 to

CC ABI97546 represent oligonucleotide sequences used in the exemplification

CC of the present invention

XX

SQ Sequence 20 BP; 7 A; 5 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2299 GGGTAGGCACGAAGCAA 2315  
||||| | |||||  
Db 4 GGGTAGACCCGAAGCAA 20

RESULT 4721  
ABI95444  
ID ABI95444 standard; DNA; 20 BP.  
XX  
AC ABI95444;  
XX  
DT 16-FEB-2002 (first entry)  
XX  
DE Capture oligonucleotide Zip ID#2531 oligo #9.  
XX  
KW Human; K-ras; PCR primer; probe; capture probe; mutation detection;  
KW ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease;  
KW infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer;  
KW oncogene; tumour suppressor; human papillomavirus; forensic;  
KW environmental monitoring; food industry; feed industry; ss.  
XX  
OS Synthetic.  
XX  
PN WO200179548-A2.  
XX  
PD 25-OCT-2001.  
XX  
PF 04-APR-2001; 2001WO-US010958.  
XX  
PR 14-APR-2000; 2000US-0197271P.  
XX  
PA (CORR ) CORNELL RES FOUND INC.  
XX  
PI Barany F, Zirvi M, Gerry NP, Favis R, Kliman R;  
XX  
DR WPI; 2002-034366/04.  
XX  
PT Designing capture oligonucleotide probes for use on a support to which  
complementary oligonucleotides hybridize with little mismatch.  
XX  
PS Example 5; Fig 29; 300pp; English.  
XX  
CC The present invention describes a method (M1) for designing capture  
oligonucleotide probes (I) for use on a support to which complementary  
oligonucleotide probes (II) will hybridise with little mismatch, where  
CC (I) have melting temperatures within a narrow range. The method is useful  
CC for detecting infectious diseases caused by bacterial infectious agents  
CC e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal  
CC infectious agents e.g. Cryptococcus neoformans, Candida albicans and  
CC Aspergillus fumigatus, viruses e.g. T-cell lymphocytotropic virus,  
CC Epstein-Barr virus and polio virus, and parasitic infectious agents  
CC selected from Onchoverva volvulus, Entamoeba histolytica and Dracunculus  
CC medinensis. The method is also useful for detecting genetic diseases such  
CC as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.  
CC Detecting cancer involving oncogenes, tumour suppressor genes, or genes  
CC involved in DNA amplification, replication, recombination or repair, the  
CC cancer is specifically associated with a gene selected from BRCA1 gene,  
CC p53 gene, human papillomavirus types 16 and 18 and liver cancers. The  
CC method is also used for environmental monitoring, forensics and the food  
CC and feed industry, detecting comprises scanning (using e.g. a scanning  
CC electron microscope and infrared microscope) the support at the  
CC particular sites and identifying if ligation of the oligonucleotide probe  
CC sets occurred and correlating (using a computer) identified ligation to a  
CC presence or absence of the target nucleotide sequences. ABI82074 to  
CC ABI97546 represent oligonucleotide sequences used in the exemplification  
CC of the present invention  
XX

SQ Sequence 20 BP; 2 A; 6 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1356 CCCACGGGTTTGGCAGC 1372  
||||| | |||||  
Db 2 CCCACGGGTCTGGTAGC 18

RESULT 4722  
ABI94329/C  
ID ABI94329 standard; DNA; 20 BP.  
XX  
AC ABI94329;  
XX  
DT 16-FEB-2002 (first entry)  
XX  
DE Capture oligonucleotide Zip ID#1416 oligo #9.  
XX  
KW Human; K-ras; PCR primer; probe; capture probe; mutation detection;  
KW ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease;  
KW infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer;  
KW oncogene; tumour suppressor; human papillomavirus; forensic;  
KW environmental monitoring; food industry; feed industry; ss.  
XX  
OS Synthetic.  
XX  
PN WO200179548-A2.  
XX  
PD 25-OCT-2001.  
XX  
PF 04-APR-2001; 2001WO-US010958.  
XX  
PR 14-APR-2000; 2000US-0197271P.  
XX  
PA (CORR ) CORNELL RES FOUND INC.  
XX  
PI Barany F, Zirvi M, Gerry NP, Favis R, Kliman R;  
XX  
DR WPI; 2002-034366/04.  
XX  
PT Designing capture oligonucleotide probes for use on a support to which  
complementary oligonucleotides hybridize with little mismatch.  
XX  
PS Example 5; Fig 29; 300pp; English.  
XX  
CC The present invention describes a method (M1) for designing capture  
oligonucleotide probes (I) for use on a support to which complementary  
oligonucleotide probes (II) will hybridise with little mismatch, where  
CC (I) have melting temperatures within a narrow range. The method is useful  
CC for detecting infectious diseases caused by bacterial infectious agents  
CC e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal  
CC infectious agents e.g. Cryptococcus neoformans, Candida albicans and  
CC Aspergillus fumigatus, viruses e.g. T-cell lymphocytotropic virus,  
CC Epstein-Barr virus and polio virus, and parasitic infectious agents  
CC selected from Onchoverva volvulus, Entamoeba histolytica and Dracunculus  
CC medinensis. The method is also useful for detecting genetic diseases such  
CC as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.  
CC Detecting cancer involving oncogenes, tumour suppressor genes, or genes  
CC involved in DNA amplification, replication, recombination or repair, the  
CC cancer is specifically associated with a gene selected from BRCA1 gene,  
CC p53 gene, human papillomavirus types 16 and 18 and liver cancers. The  
CC method is also used for environmental monitoring, forensics and the food  
CC and feed industry, detecting comprises scanning (using e.g. a scanning  
CC electron microscope and infrared microscope) the support at the  
CC particular sites and identifying if ligation of the oligonucleotide probe  
CC sets occurred and correlating (using a computer) identified ligation to a  
CC presence or absence of the target nucleotide sequences. ABI82074 to  
CC ABI97546 represent oligonucleotide sequences used in the exemplification  
CC of the present invention  
XX

SQ Sequence 20 BP; 4 A; 7 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 395 TCGCATCTGGGGGAGC 411  
|||||  
Db 19 TCGCATCTAGGGGGAGC 3

RESULT 4723  
AAL41524/c  
ID AAL41524 standard; DNA; 20 BP.  
XX  
AC AAL41524;  
XX  
DT 05-DEC-2002 (first entry)  
XX  
DE Oligonucleotide initiator SEQ ID No 13.  
XX  
KW Cytostatic; cancer; Slug gene; mesenchymal cancer cell; leukaemia;  
KW sarcoma; antitumour agent; antisense therapy; ds.  
XX  
OS Unidentified.  
XX  
PN WO200259361-A1.  
XX  
PD 01-AUG-2002.  
XX  
XX 23-JAN-2002; 2002WO-ES0000026.  
PF  
XX 23-JAN-2001; 2001ES-00000151.  
PR  
XX (UYESA-) UNIV SALAMANCA OTRI.  
PA (CNSJ ) CONSEJO SUPERIOR INVESTIGACIONES CIENTIF.  
XX  
PI Sanchez Garcia I, Orfao De Matos A, Perez Losada J;  
XX  
DR WPI; 2002-691533/74.  
XX  
PT Detecting cancerous cells, useful for diagnosis and prognosis, comprises  
PT measuring abnormally high expression of the Slug gene or its protein.  
XX  
PS Disclosure; Page 57; 61pp; Spanish.  
XX  
CC The invention relates to a method for detecting cancerous cells in a  
CC vertebrate sample. The method comprises determining aberrant expression  
CC of the Slug gene, relative to a normal control sample. The method is used  
CC to detect (for diagnosis, monitoring progression and detection of  
CC residual disease after treatment) mesenchymal cancer cells (leukaemia or  
CC sarcoma) in humans. Agents that inhibit Slug (at DNA, RNA or protein  
CC levels) are potential antitumour agents. The polynucleotides of the  
CC invention can be used in antisense therapy. This polynucleotide sequence  
CC represents an oligonucleotide relating to the Slug gene of the invention  
XX  
SQ Sequence 20 BP; 1 A; 8 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 490 CCAGGAGGGAGCGGGC 506  
|||||  
Db 19 CCAGGAAGGAGCGCGC 3

RESULT 4724  
AAL45509/c  
ID AAL45509 standard; DNA; 20 BP.  
XX  
AC AAL45509;  
XX

DT 29-AUG-2003 (revised)  
DT 06-JUN-2002 (first entry)  
XX  
DE HIV-1 gag amplification oligomer SEQ ID NO: 47.  
XX  
KW HIV-1; gag gene; pol gene; PCR; primer; drug resistance; genetic subtype;  
KW probe; ss.  
XX  
OS Human immunodeficiency virus 1.  
XX  
PN WO200220852-A1.  
XX  
PD 14-MAR-2002.  
XX  
PF 01-SEP-2000; 2000WO-US024117.  
XX  
PR 01-SEP-2000; 2000WO-US024117.  
XX  
PA (GENP-) GEN-PROBE INC.  
PA (INMR ) BIOMERIEUX SA.  
XX  
PI Yang YY, Brentano ST, Babola O, Tran N, Vernet G;  
XX WPI; 2002-292273/33.  
DR  
XX New nucleic acid oligomer, useful for detecting selected regions of gag  
PT and pol genes of human immune deficiency virus, particularly for  
PT assessing drug resistance.  
XX  
PS Claim 1; Page 62; 82pp; English.  
XX  
CC The present invention provides a number of nucleic acid oligomers which  
CC can be used to amplify the gag and pol genes of human immunodeficiency  
CC virus type I (HIV-1). These are used to detect regions of the gag and pol  
CC genes, especially regions associated with drug resistance, and also for  
CC identifying genetic subtypes of the virus. The present sequence is an  
CC oligomer of the invention. (Updated on 29-AUG-2003 to standardise OS  
CC field)  
XX  
SQ Sequence 20 BP; 3 A; 4 C; 6 G; 7 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1729 ATTATCAGAAGGTGACA 1745  
|||||  
Db 20 ATTATCAGAAGGAGCCA 4

RESULT 4725  
ABS59590/c  
ID ABS59590 standard; DNA; 20 BP.  
XX  
AC ABS59590;  
XX  
DT 05-NOV-2002 (first entry)  
XX  
DE Real-time forward PCR primer, used to determine SEC10 expression.  
XX  
KW Human; PCR; ss; SEC; NOV; immunosuppressive; hepatotropic;  
KW antiinflammatory; angiogenic-associated disorder; diagnostic;  
KW gene therapy; developmental disorder; immune disease;  
KW signal transduction pathway disorder; metabolic disorder;  
KW feeding disorder; obesity; wasting disorder; neurodegenerative disorder;  
KW Alzheimer's disease; Parkinson's disease; behavioural disorder; allergy;  
KW asthma; atherosclerosis; cardiomyopathy; angina pectoris;  
KW autoimmune disease; retinal disease; cirrhosis; diabetes;  
KW infectious disease; human immunodeficiency virus; HIV; cancer;  
KW hypertension; hypotension; multiple sclerosis; urinary retention;  
KW osteoporosis; Crohn's disease; ulcer; neurological disorder; anxiety;  
KW haemophilia; cirrhosis; immunogen; vaccine; primer.  
XX



OS Homo sapiens.  
XX WO200255705-A2.  
PN  
XX PD 18-JUL-2002.  
XX  
XX PF 11-JAN-2002; 2002WO-US000609.  
XX  
PR 11-JAN-2001; 2001US-0261013P.  
PR 11-JAN-2001; 2001US-0261014P.  
PR 11-JAN-2001; 2001US-0261018P.  
PR 11-JAN-2001; 2001US-0261026P.  
PR 11-JAN-2001; 2001US-0261029P.  
PR 17-AUG-2001; 2001US-0313170P.  
PR 10-SEP-2001; 2001US-0318410P.  
XX  
XX (CURA-) CURAGEN CORP.  
XX  
PI Mezes PS, Rastelli L, Herrmann JL, Macdougall JR, Zhong H;  
PI Casman SJ, Boldog F, Shinkets RA, Gorman L, Crasta OR, Mysore KK;  
PI Folkerts O, Martin GB, Eisen A, Spaderna SK, Vernet CAM, Bergh C;  
PI Spytek KA, Dipippo VA, Zerhusen BD, Peyman JA, Ellerman K, Stone DJ;  
PI Grosse WM, Alsobrook JP, Lepley DM, Rieger DK, Burgess CE;  
PI Edinger S;  
XX  
XX WPI; 2002-590675/63.  
XX  
XX Human SECX/NOVX polypeptide useful for diagnosing, preventing or treating  
PT disorders associated with aberrant expression or activity of SECX/NOVX  
PT nucleic acids and proteins e.g., diabetes.  
PT  
XX  
XX Example 2; Page 325; 443pp; English.  
XX  
XX The invention discloses the isolated human polypeptides, and  
CC polynucleotides encoding them, that have been designated SECX and NOVX.  
CC The polypeptides can be used for treating, or delaying, the onset of an  
CC angiogenic-associated disorder or treating a pathological state in a  
CC subject, preferably a mammal. They can also be used in determining the  
CC presence of, or predisposition to, a disease associated with altered  
CC levels of the polypeptides and polynucleotides of any one of the 12  
CC sequences (SEC1-12), for raising antibodies, for identifying an agent  
CC that binds to, or that modulates the expression or activity of the  
CC polypeptide, for treating or preventing a NOVX-associated disorder (NOV1-  
CC 8) and as a pharmaceutical composition comprising the polypeptide,  
CC polynucleotide or the antibody. The polypeptides and polynucleotides are  
CC useful in diagnostic applications where their amounts are assessed, or  
CC for the manufacture of a medicament (e.g. gene therapy) for treating or  
CC preventing disorders or syndromes such as developmental disorders, immune  
CC diseases, signal transduction pathway disorders, metabolic disorders,  
CC feeding disorders (including obesity), wasting disorders,  
CC neurodegenerative disorders (including Alzheimer's disease and  
CC Parkinson's disease), behavioural disorders, allergies, asthma,  
CC atherosclerosis, cardiomyopathy, angina pectoris, autoimmune diseases,  
CC retinal disease, cirrhosis, diabetes, infectious disease (bacterial,  
CC fungal, protozoal and viral e.g. human immunodeficiency virus, HIV),  
CC cancer (e.g. prostate cancer), hypertension, hypotension, multiple  
CC sclerosis, urinary retention, osteoporosis, Crohn's disease, ulcers,  
CC neurological disorders (e.g. anxiety), haemophilia or cirrhosis. They may  
CC also be used as immunogens to produce antibodies specific for the  
CC invention, and as vaccines. Further, they are useful for screening  
CC potential agonist and antagonist compounds. The sequences presented in  
CC ABS59542-ABS59699 are the PCR primers and probes which were used to  
CC amplify and detect expression of human SEC1-12 and NOV1-8 cDNA  
XX  
SQ Sequence 20 BP; 6 A; 7 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1123 TGCTGTGAAGCCGAAT 1139  
| | | | | | | | | |  
Db 20 TCCTGTGAAGCTGAAT 4

RESULT 4726  
ABZ85453/C  
ID ABZ85453 standard; DNA; 20 BP.  
XX  
XX AC ABZ85453;  
XX  
XX DT 17-OCT-2003 (first entry)  
XX  
XX DE Human oligonucleotide sequence.  
XX  
XX KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
XX  
XX OS Homo sapiens.  
XX  
XX PN WO200285308-A2.  
XX  
XX PD 31-OCT-2002.  
XX  
XX PF 23-APR-2002; 2002WO-US013135.  
XX  
XX PR 24-APR-2001; 2001US-0286137P.  
XX  
XX PA (EPIG-) EPIGENESIS PHARM INC.  
XX  
XX PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
XX DR WPI; 2003-229219/22.  
XX  
XX PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
PS Claim 15; SEQ ID NO 695; 872pp; English.  
XX  
CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 14 A; 1 C; 1 G; 4 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2256 TTATTTCATATTTATT 2272  
| | | | | | | | | |  
Db 20 TTATTTCATATTTATT 4

RESULT 4727  
ABZ88060  
ID ABZ88060 standard; DNA; 20 BP.  
XX  
AC ABZ88060;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human oligonucleotide sequence.  
XX  
KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
XX  
OS Homo sapiens.  
XX  
PN WO200285308-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013135.  
XX  
PR 24-APR-2001; 2001US-0286137P.  
XX  
PA (EPIG-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
DR WPI; 2003-229219/22.  
XX  
PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
PS Disclosure; SEQ ID NO 3302; 872pp; English.  
XX  
CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 4 A; 6 C; 6 G; 4 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 650 GCCGAGAACCTGGGGCT 666  
|||||  
Db 4 GCCGAGATCCTGGAGCT 20

RESULT 4728  
ABZ89895  
ID ABZ89895 standard; DNA; 20 BP.  
XX  
AC ABZ89895;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human oligonucleotide sequence.  
XX  
KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
XX  
OS Homo sapiens.  
XX  
PN WO200285308-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013135.  
XX  
PR 24-APR-2001; 2001US-0286137P.  
XX  
PA (EPIG-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
DR WPI; 2003-229219/22.  
XX  
PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
PS Disclosure; SEQ ID NO 5137; 872pp; English.  
XX  
CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 12 A; 1 C; 3 G; 4 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 2783 TTGAAAAAATAAAAAA 2799  
|||||  
Db 4 TTGAGGAAAAAATAAAAA 20





RESULT 4731  
ABZ88828/c  
ID ABZ88828 standard; DNA; 20 BP.  
XX  
AC ABZ88828;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human oligonucleotide sequence.  
XX  
KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
XX  
OS Homo sapiens.  
XX  
PN WO200285308-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013135.  
XX  
PR 24-APR-2001; 2001US-0286137P.  
XX  
PA (EPIG-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
DR WPI; 2003-229219/22.  
XX  
PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
PS Disclosure; SEQ ID NO 4070; 872pp; English.  
XX  
CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 6 A; 2 C; 2 G; 10 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2729 CCAATAATGTTGTGT 2745  
Db 19 CCAAAAATGTTATGT 3

RESULT 4732  
ABZ89594/c  
ID ABZ89594 standard; DNA; 20 BP.  
XX  
AC ABZ89594;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human oligonucleotide sequence.  
XX  
KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
XX  
OS Homo sapiens.  
XX  
PN WO200285308-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013135.  
XX  
PR 24-APR-2001; 2001US-0286137P.  
XX  
PA (EPIG-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
DR WPI; 2003-229219/22.  
XX  
PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
PS Disclosure; SEQ ID NO 4836; 872pp; English.  
XX  
CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 13 A; 0 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2161 TCTCCTTTTTTTTTTTT 2177  
Db 17 TCCCATTTTTTTTTTTT 1



RESULT 4733  
ABZ90507  
ID ABZ90507 standard; DNA; 20 BP.  
XX  
AC ABZ90507;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human oligonucleotide sequence.  
XX  
KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; lung; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
XX  
OS Homo sapiens.  
XX  
PN WO200285308-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013135.  
XX  
PR 24-APR-2001; 2001US-0286137P.  
XX  
PA (EPIG-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
DR WPI; 2003-229219/22.  
XX  
PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
PS Disclosure; SEQ ID NO 5749; 872pp; English.  
XX  
CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of ubiquinone or  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 8 A; 1 C; 2 G; 9 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 1823 TTAGAATCTTTTAAATA 1839  
Db 1 TTAGAATTTTAAAGA 17

RESULT 4734  
ABZ97297/c  
ID ABZ97297 standard; DNA; 20 BP.  
XX  
AC ABZ97297;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human nucleic acid sequence.  
XX  
KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; lung; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
XX  
OS Homo sapiens.  
XX  
PN WO200285308-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013135.  
XX  
PR 24-APR-2001; 2001US-0286137P.  
XX  
PA (EPIG-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
DR WPI; 2003-229219/22.  
XX  
PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
PS Disclosure; SEQ ID NO 12539; 872pp; English.  
XX  
CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of ubiquinone or  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 3 A; 10 C; 5 G; 2 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 561 AGCGCGGCGCGGTGAGC 577  
Db 19 AGCGCGGCGGTGTCAGC 3

RESULT 4735  
ABZ86168  
ID ABZ86168 standard; DNA; 20 BP.  
XX AC ABZ86168;  
XX DT 17-OCT-2003 (first entry)  
XX DE Human oligonucleotide sequence.  
XX KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiqunone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
XX OS Homo sapiens.  
XX PN WO200285308-A2.  
XX PD 31-OCT-2002.  
XX PF 23-APR-2002; 2002WO-US013135.  
XX PR 24-APR-2001; 2001US-0286137P.  
XX PA (EPIG-) EPIGENESIS PHARM INC.  
XX PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX WPI; 2003-229219/22.  
XX DR  
XX PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiqunone.  
XX PS Claim 15; SEQ ID NO 1410; 872pp; English.  
XX CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiqunone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiqunone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX SQ Sequence 20 BP; 5 A; 6 C; 2 G; 7 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1469 CCAGCTGATCTTAACAA 1485  
Db 3 CCAGCTGTTTAAACAA 19

RESULT 4736  
ABZ94127/c  
ID ABZ94127 standard; DNA; 20 BP.  
XX AC ABZ94127;  
XX DT 17-OCT-2003 (first entry)  
XX DE Human oligonucleotide sequence.  
XX KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiqunone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
XX OS Homo sapiens.  
XX PN WO200285308-A2.  
XX PD 31-OCT-2002.  
XX PF 23-APR-2002; 2002WO-US013135.  
XX PR 24-APR-2001; 2001US-0286137P.  
XX PA (EPIG-) EPIGENESIS PHARM INC.  
XX PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX WPI; 2003-229219/22.  
XX DR  
XX PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiqunone.  
XX PS Disclosure; SEQ ID NO 9369; 872pp; English.  
XX CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiqunone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiqunone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX SQ Sequence 20 BP; 14 A; 1 C; 3 G; 1 T; 0 U; 1 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 83.3%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 2175 TTTTNTTTTAACTTT 2192  
Db 20 TTTTNTTTTCACTGT 3





RESULT 4739  
ABZ99084  
ID ABZ99084 standard; DNA; 20 BP.  
XX  
AC ABZ99084;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human PDE4C oligonucleotide sequence.  
XX  
KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytotstatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
XX  
OS Homo sapiens.  
XX  
PN WO200285308-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013135.  
XX  
PR 24-APR-2001; 2001US-0286137P.  
XX  
PA (EPIG-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
DR WPI; 2003-229219/22.  
XX  
PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
PS Disclosure; SEQ ID NO 14326; 872pp; English.  
XX  
CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytotstatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 3 A; 2 C; 1 G; 14 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 2171 TTTTCTTTTATTTT 2187  
Db 1 TTTTCTTTTATTTT 17

RESULT 4740  
ABZ93066/c  
ID ABZ93066 standard; DNA; 20 BP.  
XX  
AC ABZ93066;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human oligonucleotide sequence.  
XX  
KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytotstatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
XX  
OS Homo sapiens.  
XX  
PN WO200285308-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013135.  
XX  
PR 24-APR-2001; 2001US-0286137P.  
XX  
PA (EPIG-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
DR WPI; 2003-229219/22.  
XX  
PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
PS Disclosure; SEQ ID NO 8308; 872pp; English.  
XX  
CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytotstatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 4 A; 4 C; 1 G; 11 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 1517 TAAAATTGGAACGAAGA 1533  
Db 17 TAAAATTGTAAGAAGA 1



RESULT 4741  
ABZ85437  
ID ABZ85437 standard; DNA; 20 BP.  
XX  
AC ABZ85437;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human oligonucleotide sequence.  
XX  
KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
XX  
OS Homo sapiens.  
XX  
PN WO200285308-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013135.  
XX  
PR 24-APR-2001; 2001US-0286137P.  
XX  
PA (EPIG-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
DR WPI; 2003-229219/22.  
XX  
PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
PS Claim 15; SEQ ID NO 679; 872pp; English.  
XX  
CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 8 A; 2 C; 1 G; 9 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. NO. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1774 TTTTGTGAAACCCAT 1790  
DB 1 TTTTGTGAAACCAAT 17

RESULT 4742  
ABZ91047  
ID ABZ91047 standard; DNA; 20 BP.  
XX  
AC ABZ91047;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human oligonucleotide sequence.  
XX  
KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
XX  
OS Homo sapiens.  
XX  
PN WO200285308-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013135.  
XX  
PR 24-APR-2001; 2001US-0286137P.  
XX  
PA (EPIG-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
DR WPI; 2003-229219/22.  
XX  
PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
PS Disclosure; SEQ ID NO 6289; 872pp; English.  
XX  
CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 2 A; 4 C; 1 G; 13 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. NO. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2154 ATTTTTCCTCTTTT 2170  
DB 1 ATTTTTCCTCTTGT 17

RESULT 4743  
ABZ91735/c  
ID ABZ91735 standard; DNA; 20 BP.  
XX AC ABZ91735;  
XX DT 17-OCT-2003 (first entry)  
XX DE Human oligonucleotide sequence.  
XX KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
XX OS Homo sapiens.  
XX PN WO200285308-A2.  
XX PD 31-OCT-2002.  
XX PF 23-APR-2002; 2002WO-US013135.  
XX PR 24-APR-2001; 2001US-0286137P.  
XX PA (EPIG-) EPIGENESIS PHARM INC.  
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX WPI; 2003-229219/22.  
XX PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX PS Disclosure; SEQ ID NO 6977; 872pp; English.  
XX CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX SQ Sequence 20 BP; 13 A; 0 C; 1 G; 6 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 2519 TTTTATTCATATATATA 2535  
DB 18 TATTTTCATATATATA 2

RESULT 4744  
ABZ85702  
ID ABZ85702 standard; DNA; 20 BP.  
XX AC ABZ85702;  
XX DT 17-OCT-2003 (first entry)  
XX DE Human oligonucleotide sequence.  
XX KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
XX OS Homo sapiens.  
XX PN WO200285308-A2.  
XX PD 31-OCT-2002.  
XX PF 23-APR-2002; 2002WO-US013135.  
XX PR 24-APR-2001; 2001US-0286137P.  
XX PA (EPIG-) EPIGENESIS PHARM INC.  
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX WPI; 2003-229219/22.  
XX PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX PS Claim 15; SEQ ID NO 944; 872pp; English.  
XX CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of ubiquinone or  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX SQ Sequence 20 BP; 6 A; 2 C; 4 G; 8 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 2591 ATTTAATTGAAACTCTC 2607  
DB 4 ATTTAATGGAAAGTCTC 20

RESULT 4745  
ABZ85292  
ID ABZ85292 standard; DNA; 20 BP.  
XX  
AC ABZ85292;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human oligonucleotide sequence.  
XX  
KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
XX  
OS Homo sapiens.  
XX  
PN WO200285308-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013135.  
XX  
PR 24-APR-2001; 2001US-0286137P.  
XX  
PA (EPIG-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
DR WPI; 2003-229219/22.  
XX  
PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
PS Claim 15; SEQ ID NO 534; 872pp; English.  
XX  
CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 0 A; 5 C; 13 G; 2 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 51 GCGGCGGGGGCGGCGGC 67  
DB 1 GGGGCGGGGGCGGCGGC 17

RESULT 4746  
ABZ85546  
ID ABZ85546 standard; DNA; 20 BP.  
XX  
AC ABZ85546;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human oligonucleotide sequence.  
XX  
KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
XX  
OS Homo sapiens.  
XX  
PN WO200285308-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013135.  
XX  
PR 24-APR-2001; 2001US-0286137P.  
XX  
PA (EPIG-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
DR WPI; 2003-229219/22.  
XX  
PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
PS Claim 15; SEQ ID NO 788; 872pp; English.  
XX  
CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 5 A; 5 C; 3 G; 7 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 1327 GAACGTGCTTCTTCATT 1343  
DB 4 GAACGTGCTTCTTCATT 20



RESULT 4747  
ABZ89893  
ID ABZ89893 standard; DNA; 20 BP.  
XX  
AC ABZ89893;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human oligonucleotide sequence.  
XX  
KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytosstatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
XX  
OS Homo sapiens.  
XX  
PN WO200285308-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013135.  
XX  
PR 24-APR-2001; 2001US-0286137P.  
XX  
PA (EPIG-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
DR WPI; 2003-229219/22.  
XX  
PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
PS Disclosure; SEQ ID NO 5135; 872pp; English.  
XX  
CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytosstatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 5 A; 2 C; 2 G; 11 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1764 ATTAAGCTTTTCTTCTT 1780  
|||||  
Db 1 ATTAAGCTTTTCTTCTT 17

RESULT 4748  
ABZ98459  
ID ABZ98459 standard; DNA; 20 BP.  
XX  
AC ABZ98459;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human ICAM oligonucleotide sequence.  
XX  
KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytosstatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
XX  
OS Homo sapiens.  
XX  
PN WO200285308-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013135.  
XX  
PR 24-APR-2001; 2001US-0286137P.  
XX  
PA (EPIG-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
DR WPI; 2003-229219/22.  
XX  
PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
PS Disclosure; SEQ ID NO 13701; 872pp; English.  
XX  
CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytosstatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 4 A; 7 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 21 GTCCAGTGACCCGGACA 37  
|||||  
Db 1 GTCCAGTTTCCCGGACA 17



RESULT 4749  
ABZ88711  
ID ABZ88711 standard; DNA; 20 BP.  
XX  
AC ABZ88711;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human oligonucleotide sequence.  
XX  
KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; lung; adenosine sensitivity;  
KW lung inflammation; bronchodilation; bronchoconstriction; lung allergy;  
XX  
OS Homo sapiens.  
XX  
PN WO200285308-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013135.  
XX  
PR 24-APR-2001; 2001US-0286137P.  
XX  
PA (EPIG-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
DR WPI; 2003-229219/22.  
XX  
PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
PS Disclosure; SEQ ID NO 3953; 872pp; English.  
XX  
CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 4 A; 5 C; 3 G; 8 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 2706 AACTCTCTGCCTGTAA 2722  
Db 1 AACTCTCTGCCTTTATA 17

RESULT 4750  
ABZ87697/c  
ID ABZ87697 standard; DNA; 20 BP.  
XX  
AC ABZ87697;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human oligonucleotide sequence.  
XX  
KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; lung; adenosine sensitivity;  
KW lung inflammation; bronchodilation; bronchoconstriction; lung allergy;  
XX  
OS Homo sapiens.  
XX  
PN WO200285308-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013135.  
XX  
PR 24-APR-2001; 2001US-0286137P.  
XX  
PA (EPIG-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
DR WPI; 2003-229219/22.  
XX  
PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
PS Disclosure; SEQ ID NO 2939; 872pp; English.  
XX  
CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 12 A; 3 C; 2 G; 3 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 2173 TTTTCTTTTCTTTTAAAC 2189  
Db 18 TTTTGTCTTTTAAAC 2

RESULT 4751  
ABZ88668  
ID ABZ88668 standard; DNA; 20 BP.  
XX  
AC ABZ88668;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human oligonucleotide sequence.  
XX  
KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytosstatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
XX  
OS Homo sapiens.  
XX  
PN WO200285308-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013135.  
XX  
PR 24-APR-2001; 2001US-0286137P.  
XX  
PA (EPIG-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
DR WPI; 2003-229219/22.  
XX  
PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
PS Disclosure; SEQ ID NO 3910; 872pp; English.  
XX  
CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytosstatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 6 A; 3 C; 2 G; 9 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 1758 TTATTCATTAAAGCTTTT 1774  
Db 1 TTATTCATGAACCTTT 17

RESULT 4752  
ABZ92288/c  
ID ABZ92288 standard; DNA; 20 BP.  
XX  
AC ABZ92288;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human oligonucleotide sequence.  
XX  
KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytosstatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
XX  
OS Homo sapiens.  
XX  
PN WO200285308-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013135.  
XX  
PR 24-APR-2001; 2001US-0286137P.  
XX  
PA (EPIG-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
DR WPI; 2003-229219/22.  
XX  
PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
PS Disclosure; SEQ ID NO 7530; 872pp; English.  
XX  
CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytosstatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 2 A; 5 C; 1 G; 12 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 2780 GAATTGAAAAA 2796  
Db 19 GACTGGAAAAA 3

RESULT 4753  
ABZ98730/c  
ID ABZ98730 standard; DNA; 20 BP.  
XX  
AC ABZ98730;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human tryptase a oligonucleotide sequence.  
XX  
KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
XX  
OS Homo sapiens.  
XX  
PN WO200285308-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013135.  
XX  
PR 24-APR-2001; 2001US-0286137P.  
XX  
PA (EPIG-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
WPI; 2003-229219/22.  
XX  
PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
PS Disclosure; SEQ ID NO 13972; 872pp; English.  
XX  
CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences.  
XX  
SQ Sequence 20 BP; 3 A; 10 C; 5 G; 2 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 561 AGCGGGCGCGGTGAGC 577  
Db 19 AGCGGGCGGTGTCAGC 3

RESULT 4754  
ABX13312  
ID ABX13312 standard; DNA; 20 BP.  
XX  
AC ABX13312;  
XX  
DT 14-MAY-2003 (first entry)  
XX  
DE Human NSDHL gene, exon 4 PCR primer #1.  
XX  
KW Human; ss; PCR; 3beta-hydroxysteroid dehydrogenase; 3beta-HSD; NSDHL;  
KW cholesterol biosynthesis; mevalonic aciduria; desmosterolosis;  
KW Smith-Lemli-Opitz syndrome; SLOS; Conradi-Hunermann-Happle syndrome;  
KW chondroplasia punctata; X-linked disease; chromosome Xq28; psoriasis;  
KW CHILD syndrome; bone disorder; osteoporosis; osteosclerosis;  
KW congenital hemidysplasia; ichthyosiform erythroderma and limb defect;  
KW ichthyosis; eye disorder; cataract; microphthalmia; arthritis;  
KW cholest-8(9)-en-3beta-ol; skin disorder; primer.  
XX  
OS Homo sapiens.  
XX  
PN US2002172956-A1.  
XX  
PD 21-NOV-2002.  
XX  
PF 05-SEP-2001; 2001US-00946406.  
XX  
PR 01-JUN-1999; 99US-0137020P.  
PR 01-JUN-2000; 2000US-00588976.  
XX  
PA (CHIL-) CHILDRENS HOSPITAL INC.  
XX  
PI Herman GE, Kelley RI, Grange DK;  
XX  
WPI; 2003-310984/30.  
XX  
DR Diagnosing CHILD syndrome or psoriasis, by detecting differences between  
XX patient and wild type genes encoding 3 beta-hydroxysteroid dehydrogenase  
XX or accumulation of sterol intermediates in body fluids of the patient.  
PS Disclosure; Page 2; 23pp; English.  
XX  
CC The invention relates to diagnosing congenital hemidysplasia,  
XX ichthyosiform erythroderma and limb defects (CHILD) syndrome or psoriasis  
XX in a patient, involves detecting nucleotide difference between patient  
XX NSDHL oligonucleotide (gene encoding 3beta-hydroxysteroid dehydrogenase  
XX (3beta-HSD)) and wild type NSDHL gene, or detecting accumulation of  
XX sterol intermediates before the generation of cholest-8(9)-en-3beta-ol in  
XX the cholesterol biosynthetic pathway, in the body fluids or cells of the  
XX patient. The method is useful for diagnosing CHILD syndrome and psoriasis  
XX in a patient. Other diseases implicated in defects of the cholesterol  
XX biosynthetic pathway include mevalonic aciduria, desmosterolosis, Smith-  
XX Lemli-Opitz syndrome (SLOS), Conradi-Hunermann-Happle syndrome;  
XX chondroplasia punctata (X-linked disease), bone disorders, osteoporosis,  
XX osteosclerosis, skin disorders, ichthyosis, eye disorders, (e.g. cataract  
XX and microphthalmia) and arthritis. The human NSDHL gene is located on  
XX chromosome X128. The present sequence is a primer for routine sequencing  
XX of and mutation detection in the human NSDHL gene (one of 8 exons or the  
XX non-coding region)  
SQ Sequence 20 BP; 5 A; 6 C; 4 G; 5 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1871 GCCATTGAAATGTCAAA 1887  
Db 2 GCCATTGACCTGTCAAA 18







ID XX ACC55341 standard; DNA; 20 BP.  
AC XX ACC55341;  
XX XX  
DT 27-JUN-2003 (first entry)  
XX XX  
DE Human ADAMTS13 exon 17-18 forward PCR primer.  
XX XX  
KW Human; thrombotic thrombocytopenic purpura; TTP; disintegrin;  
KW metalloproteinase; thrombospondin 1-like domains 13; ADAMTS13;  
KW thrombolytic; haemostatic; PCR; primer; RT-PCR; 5' RACE; 3' RACE; ss.  
XX XX  
OS Homo sapiens.  
XX XX  
PN WO2003016492-A2.  
XX XX  
PD 27-FEB-2003.  
XX XX  
PF 16-AUG-2002; 2002WO-US026285.  
XX XX  
PR 16-AUG-2001; 2001US-0312834P.  
PR 16-AUG-2002; 2002US-00312834.  
XX XX  
PA (UNMI ) UNIV MICHIGAN.  
XX XX  
PI Ginsburg D, Levy G, Tsai H;  
XX XX  
DR WPI; 2003-268318/26.  
XX XX  
PT Identifying risk of developing thrombotic thrombocytopenic purpura  
PT disease, using a novel disintegrin and metalloproteinase containing  
PT thrombospondin 1-like domains genes and proteases.  
XX XX  
PS Example 1; Page 89; 98pp; English.  
XX XX  
CC The invention relates to a novel method for identifying subjects at risk  
CC of developing thrombotic thrombocytopenic purpura (TTP) disease,  
CC comprising providing nucleic acid having a disintegrin and  
CC metalloproteinase containing thrombospondin 1-like domains 13 (ADAMTS13)  
CC gene from a subject, and detecting the presence or absence of one or more  
CC variations in the ADAMTS13 gene. The method of the invention has  
CC thrombolytic and haemostatic activity. The methods and compositions of  
CC the present invention are useful for the diagnosis and treatment of,  
CC and/or analysing risks for thrombotic thrombocytopenic purpura. The  
CC present sequence is used in the exemplification of the invention  
XX XX  
SQ Sequence 20 BP; 5 A; 3 C; 6 G; 6 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 2609 GTTCAGAAAGCAATAAC 2625  
Db 17 GTTCAGCAAGCAATCAC 1  
  
RESULT 4758  
ACC45351  
ID ACC45351 standard; DNA; 20 BP.  
XX XX  
AC ACC45351;  
XX XX  
DT 17-JUN-2003 (first entry)  
XX XX  
DE Escherichia coli sucD related probe SEQ ID NO:47.  
XX XX  
KW Fine chemical; Coryneform bacteria; Escherichia coli; microorganism;  
KW genetically modified microorganism; metabolite; biosynthesis; amino acid;  
KW vitamin; nucleoside; nucleotide; pigment; protein; human medicine;  
KW pharmaceutical; food; animal feeding; sucD; probe; ss.  
XX XX  
OS Escherichia coli.

OS Synthetic.  
XX XX  
PN WO2003023016-A2.  
XX XX  
PD 20-MAR-2003.  
XX XX  
PF 11-SEP-2002; 2002WO-EP010174.  
XX XX  
PR 13-SEP-2001; 2001DE-01045043.  
XX XX  
PA (DEGS ) DEGUSSA AG.  
XX XX  
PI Farwick M, Hermann T;  
XX XX  
DR WPI; 2003-354534/33.  
XX XX  
PT Microorganism useful for producing e.g. fine chemicals, has permanently  
PT altered phosphorylatability protein, such that biosynthesis of fine  
PT chemical synthesized by microorganism is increased compared to wild-type.  
XX XX  
PS Disclosure; Page 119; 120pp; English.  
XX XX  
CC The present invention describes a microorganism (I), in which the  
CC phosphorylatability of at least one protein has been permanently altered  
CC such that the biosynthesis of at least one fine chemical synthesised by  
CC the microorganism is increased compared to the wild type. Also described:  
CC (1) use of a DNA (II) sequence coding for a protein which contains a  
CC phosphorylation site, where the sequence contains such a mutation that  
CC the protein is changed in its phosphorylatability for the production of  
CC (I), or for the production of fine chemicals; and (2) a method for  
CC producing fine chemicals or metabolites comprising using (I). (I) is  
CC useful for producing fine chemicals or metabolites, such as amino acids,  
CC vitamins, nucleosides, nucleotides, pigments or proteins. The amino acids  
CC and vitamins produced using (I) can be used in human medicine, in the  
CC pharmaceutical industry, food industry and in animal feeding. (I)  
CC produces larger amount of desired fine chemical or a metabolite than the  
CC wild type. The present sequence represents a probe for sucD from  
CC Escherichia coli, which is used in an example from the present invention  
XX XX  
SQ Sequence 20 BP; 4 A; 8 C; 4 G; 4 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 592 CTACCGCCGCTCCGACC 608  
Db 1 CTACCGCCGATCTGACC 17  
  
RESULT 4759  
ADA26702  
ID ADA26702 standard; DNA; 20 BP.  
XX XX  
AC ADA26702;  
XX XX  
DT 20-NOV-2003 (first entry)  
XX XX  
DE Rat Jun N-terminal kinase, JNK3, antisense oligonucleotide ISIS21912.  
XX XX  
KW ss; rat; Jun N-terminal kinase; JNK1; JNK2; JNK3; antisense; cytostatic;  
KW antiinflammatory; apoptosis; prostate cancer; prostate tumour;  
KW inflammation; fibrosis; fibrotic disease; fibrotic scarring;  
KW peritoneal adhesion; lung fibrosis; conjunctival scarring;  
KW hyperproliferative disease; cancer; probe.  
XX XX  
OS Rattus norvegicus.  
XX XX  
FH Key Location/Qualifiers  
FT modified\_base 1..20  
FT /\*tag= b  
FT /mod\_base= OTHER  
FT /note= "All cytosines are 5-methyl-cytosines"

```
FT modified_base 1. .5
FT /*tag= a
FT /mod_base= OTHER
FT /note= "2'methoxyethoxy-modified and phosphorothioate
FT linkages"
FT 16. .20
FT modified_base
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'methoxyethoxy-modified and phosphorothioate
FT linkages"
XX
PN US2003004120-A1.
XX
PD 02-JAN-2003.
XX
PF 31-JAN-2001; 2001US-00774809.
XX
PR 13-AUG-1997; 97US-00910629.
PR 07-AUG-1998; 98US-00130616.
PR 07-APR-1999; 99US-00287796.
PR 15-SEP-1999; 99US-00396902.
XX
PA (MCKA/) MCKAY R.
PA (DEAN/) DEAN N M.
PA (MONI/) MONIA B P.
PA (NERO/) NERO P.
PA (GAAR/) GAARDE W A.
XX
PI Mckay R, Dean NM, Monia BP, Nero P, Gaarde WA;
XX WPI; 2003-311908/30.
XX
PT New oligonucleotides which hybridizes to, and modulates the expression of
PT Jun N-terminal kinase, useful for treating a disease or condition
PT characterized by a reduction in apoptosis, e.g. prostate cancer,
PT inflammation or fibrosis.
XX
PS Example 7; Page 36; 69pp; English.
XX
CC The invention relates to an oligonucleotide (antisense, AS) comprising 8-
CC 30 nucleotides connected by covalent linkages, where the oligonucleotide
CC has a sequence specifically hybridisable with a nucleic acid encoding a
CC Jun N-terminal kinase (JNK) protein and modulates the expression of the
CC JNK protein. Also included are a pharmaceutical composition comprising
CC the AS oligonucleotide (or its bioequivalent, and a pharmaceutical
CC carrier), treating an animal having/suspected of having/prone to having a
CC hyperproliferative disease (by administering to a prophylactic or
CC therapeutic amount of the composition of the AS oligonucleotide),
CC modulating the expression of a JNK protein in cells or tissues by
CC contacting the cells or tissues with the AS oligonucleotide, modulating
CC the cell cycle progression (or the phosphorylation of a protein
CC phosphorylated by a JNK protein, or expression of a cellular protein that
CC promotes one or more metastatic events in cultured cells or the cells of
CC an animal) by administering the oligonucleotide to the cells, inhibiting
CC the growth of a tumour in an animal by administering the oligonucleotide,
CC inducing apoptosis in a cell by contacting a cell with an AS
CC oligonucleotide for JNK2 and treating a human having a disease or
CC condition associated with a JNK protein or characterised by a reduction
CC in apoptosis by administering a prophylactic or therapeutic amount of the
CC AS oligonucleotide. The antisense oligonucleotide is useful for treating
CC a disease or condition characterised by a reduction in apoptosis, such as
CC prostate cancer or prostate tumour, inflammation, fibrosis or fibrotic
CC disease or condition (e.g. fibrotic scarring, peritoneal adhesions, lung
CC fibrosis or conjunctival scarring), hyperproliferative disease or
CC condition, such as cancer. The antisense oligonucleotides may also be
CC used as research agents and diagnostic aids, to detect the presence of
CC JNK protein-specific nucleic acids in a cell or tissue sample, and to
CC study the function of one or more genes in the animal. The present
CC sequence is an antisense oligonucleotide targeting a rat JNK sequence.
XX
SQ Sequence 20 BP; 7 A; 4 C; 8 G; 1 T; 0 U; 0 Other;
Query Match 0.5%; Score 13.8; DB 1; Length 20;
```

```
Best Local Similarity 88.2%; Pred. No. 4.3e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1457 GGAGACCAGAGTCCAGC 1473
  |||||
Db 3 GGAGACCAAGTCGAGC 19

RESULT 4760
ABZ58576/c
ID ABZ58576 standard; DNA; 20 BP.
XX
AC ABZ58576;
XX
DT 13-MAY-2003 (first entry)
XX
DE Chitinase YM-3 forward PCR primer.
XX
KW Chitinase; YM-3; enzyme; mouse; transgenic animal; inhibitor;
KW antiinflammatory; gastrointestinal; dermatological; antiallergic;
KW antiasthmatic; PCR; primer; ss.
XX
OS Mus sp.
XX
PN WO2003009808-A2.
XX
PD 06-FEB-2003.
XX
PF 23-JUL-2002; 2002WO-US023516.
XX
PR 24-JUL-2001; 2001US-0307432P.
XX
PA (UYYA ) UNIV YALE.
PA (ELIA/) ELIAS J A.
PA (ZHUZ/) ZHU Z.
XX
PI Elias JA, Zhu Z;
XX WPI; 2003-289788/28.
XX
PT Treating an inflammatory disease associated with increased levels of
PT chitinase and chitinase-like molecules, such as chronic obstructive
PT pulmonary disease, pneumonia, inflammatory bowel disease, emphysema and
PT atopic dermatitis.
XX
PS Example; Page 51; 100pp; English.
XX
CC The present sequence is a forward primer for the mammalian chitinase YM-3
CC gene. It was used with the reverse primer given in ABZ58577 in an RT-PCR
CC to determine YM-3 mRNA levels in mice. In lung RNA from non-transgenic
CC animals, YM mRNA was at or near the lower sensitivity levels of the
CC assay. In transgenic mice constitutively expressing interleukin-13 (IL-
CC 13), YM mRNA was detected in 1- to 3-month old animals. The invention
CC provides methods for treating or preventing an inflammatory disease in a
CC mammal (human), where the disease is associated with an increased level
CC of a chitinase-like molecule (e.g. YM-3) or interleukin-13, or with a Th2
CC inflammatory response. The methods involve the administration of an
CC inhibitor of a chitinase-like molecule, such as a chemical compound,
CC antibody, ribozyme or antisense nucleic acid. The inflammatory disease is
CC asthma, chronic obstructive pulmonary disease, interstitial lung disease,
CC chronic obstructive lung disease, chronic bronchitis, eosinophilic
CC bronchitis, eosinophilic pneumonia, pneumonia, inflammatory bowel
CC disease, atopic dermatitis, atopy, allergy, allergic rhinitis, idiopathic
CC pulmonary fibrosis, scleroderma or emphysema (all claimed). Methods are
CC also provided for identifying a compound useful for treating an
CC inflammatory disease, using e.g. a transgenic mouse expressing IL-13
XX
SQ Sequence 20 BP; 7 A; 5 C; 1 G; 7 T; 0 U; 0 Other;
Query Match 0.5%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 4.3e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

QY 2682 GGGTGAATGGAGATT 2698  
Best Local Similarity 88.2%; Pred. NO. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
Db 20 GTGTCAAATGGAGATT 4

RESULT 4761  
AAD55426  
ID AAD55426 standard; DNA; 20 BP.  
XX AAD55426;  
XX  
DT 07-AUG-2003 (first entry)  
XX  
DE Human FGFR-3 antisense oligonucleotide, ISIS #125105.  
XX  
KW Human; antisense; fibroblast growth factor receptor 3; prophylaxis;  
KW developmental disorder; hyperproliferative disorder; antisense therapy;  
KW FGFR-3; ACH; JTK4; CEK2; cancer; phosphorothioate; ss.  
XX  
OS Homo sapiens.  
OS Synthetic.  
XX  
FH Key Location/Qualifiers  
FT modified\_base 1. .20  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "Phosphorothioate backbone; All cytidine residues  
FT are 5-methylcytidines"  
FT modified\_base 1. .5  
FT /\*tag= b  
FT /mod\_base= OTHER  
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"  
FT modified\_base 16. .20  
FT /\*tag= c  
FT /mod\_base= OTHER  
FT /note= "2 -methoxyethyl (2'-MOE) nucleotides"  
XX  
PN WO2003023004-A2.  
XX  
PD 20-MAR-2003.  
XX  
PF 06-SEP-2002; 2002WO-US028549.  
XX  
PR 10-SEP-2001; 2001US-00953047.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Monia BP, Wyatt JR;  
XX  
DR WPI; 2003-313244/30.  
XX  
PT Novel compound targeted to a nucleic acid molecule encoding fibroblast  
PT growth factor receptor 3, useful for inhibiting the expression of the  
PT receptor and for treating an animal having cancer or developmental  
PT disorder.  
XX  
PS Claim 3; Page 78; 120pp; English.  
XX  
CC The invention relates to antisense compounds targetted to a nucleic acid  
CC molecule encoding fibroblast growth factor (FGF) receptor 3 (also known  
CC as FGFR-3, ACH, JTK4 and CEK2) to inhibit its expression. Antisense  
CC compounds of the invention are useful for treating diseases or conditions  
CC associated with FGFR-3 such as developmental disorders or  
CC hyperproliferative disorders, especially cancer of colorectal, bladder,  
CC bone, lung, cervical, breast or skin. They are useful as research  
CC reagents, therapeutics, prophylaxis, kits and diagnostics, and as tools  
CC in differential and/or combinatorial analyses to elucidate expression  
CC patterns of a portion of the genes expressed within cells and tissues.  
CC They are also useful in antisense therapy. The present sequence is an  
CC antisense oligonucleotide targetted to human FGFR-3  
XX  
SQ Sequence 20 BP; 2 A; 8 C; 8 G; 2 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. NO. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 444 CGGCGCCACAGGAGC 460  
Db 2 CGGCGTCCTCAGGAGC 18

RESULT 4762  
ABX12687/C  
ID ABX12687 standard; DNA; 20 BP.  
XX ABX12687;  
XX  
DT 10-MAY-2003 (first entry)  
XX  
DE Human IL-4/IL-13 receptor DNA, antisense oligonucleotide #7.  
XX  
KW Human; inflammation; 2'6'-diaminopurine; DAP; antisense therapy;  
KW DAP-modified oligonucleotide; pulmonary disease; respiratory disease;  
KW neurological disease; cardiovascular disease; rheumatological disease;  
KW digestive disease; cutaneous disease; ophthalmological disease;  
KW urinary system disease; pathogen infection; genetic disease; cancer;  
KW airway; nose; pulmonary fibrosis; adult respiratory distress syndrome;  
KW cystic fibrosis; chronic obstructive lung disease; chronic bronchitis;  
KW eosinophilic bronchitis; asthma; allergy; allergic rhinitis; sinusitis;  
KW hypereosinophilia; cardiac; ophthalmological; cytostatic; antiasthmatic;  
KW antiallergic; antiinflammatory; immunosuppressive; atopic disease;  
KW neoplastic cell proliferation; antisense; IL-4; IL-13;  
KW interleukin-4 receptor; interleukin-13 receptor; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO2003004511-A2.  
XX  
PD 16-JAN-2003.  
XX  
PF 08-JUL-2002; 2002WO-CA001046.  
XX  
PR 06-JUL-2001; 2001US-0303071P.  
XX  
PA (TOPI-) TOPIGEN PHARM INC.  
XX  
PI Renzi P, Allam M, Allakhverdi Z;  
XX  
DR WPI; 2003-247944/24.  
XX  
PT Increasing in vivo efficacy of a nucleic acid molecule that is  
PT administered to a mammal for inhibiting inflammation in mammals, involves  
PT incorporating into the nucleic acid molecule at least one nucleotide  
PT substitute.  
PS Claim 28; Page 11; 63pp; English.  
XX  
CC The present invention relates to a method for increasing the in vivo  
CC efficacy of oligonucleotides and inhibiting inflammation. The  
CC oligonucleotides comprise at least one nucleotide substitute of 2'6'-  
CC diaminopurine (DAP) and/or its analogue. The DAP nucleotide substitutions  
CC are useful for increasing in vivo efficacy of a nucleic acid molecule  
CC that is administered to a mammal. The DAP-modified oligonucleotides are  
CC useful in antisense therapy for treating and/or preventing  
CC pulmonary/respiratory diseases, neurological diseases, cardiovascular  
CC diseases, rheumatological diseases, digestive diseases, cutaneous  
CC diseases, ophthalmological diseases, urinary system diseases, pathogen  
CC infections, genetic diseases, general inflammation and cancers. The  
CC respiratory system disease is a sickness associated with an inflammation  
CC of the lungs, the airways and/or the nose. The respiratory system disease  
CC is selected from pulmonary fibrosis, adult respiratory distress syndrome,  
CC cystic fibrosis, chronic obstructive lung disease, chronic bronchitis,  
CC eosinophilic bronchitis, asthma, allergy, allergic rhinitis, sinusitis  
CC and hypereosinophilia. The DAP-modified oligonucleotides are more stable  
CC in the body, more effective, and less toxic than standard antisense

CC oligonucleotides. DAP or its analogues are more effective than other  
CC substitutes of adenosine. ABX12681-ABX12698 represent antisense  
CC oligonucleotides for treating or preventing atopic diseases and  
CC neoplastic cell proliferation

XX  
SQ Sequence 20 BP; 0 A; 16 C; 4 G; 0 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 51 GCGCGGGGGCGGCGGC 67  
| ||||| ||||| |||||  
Db 18 GGGCGGGGGCGGCGGC 2

RESULT 4763  
ACA60924/c  
ID ACA60924 standard; DNA; 20 BP.  
XX  
AC ACA60924;  
XX  
DT 11-AUG-2003 (first entry)  
XX  
DE Caenorhabditis elegans SUR-8 exon 1 amplification primer #1.  
XX  
KW SUR-8; Ras; PCR; cancer; Ras signalling; cell differentiation; ss;  
KW cell proliferation; cell growth; primer; Ras suppressor.  
XX  
OS Caenorhabditis elegans.  
XX  
PN US6506889-B1.  
XX  
PD 14-JAN-2003.  
XX  
PF 19-MAY-1998; 98US-00081149.  
XX  
PR 19-MAY-1998; 98US-00081149.  
XX  
PA (UYTE-) UNIV TECHNOLOGY CORP.  
XX  
PI Han M, Sieburth D;  
XX  
DR WPI; 2003-415431/39.  
XX  
PT New nucleotide sequences encoding a suppressor of ras-8 protein, useful  
PT as targets for screening anticancer drugs that can alter Ras signaling,  
PT and the physiological effects of Ras on cell growth, differentiation and  
PT proliferation.  
XX  
PS Claim 7; Col 41; 67pp; English.  
XX  
CC The invention relates to an isolated nucleotide sequence encoding a  
CC suppressor of ras-8 (SUR-8) protein. Ras proteins are membrane bound  
CC GTPases. The nucleotide sequences are useful as targets for screening  
CC drugs e.g. anticancer drugs, that can alter Ras signalling and the  
CC physiological effects of Ras on cell growth, differentiation and  
CC proliferation. The present sequence represents the Caenorhabditis elegans  
CC SUR-8 exon 1 amplification primer #1  
XX  
SQ Sequence 20 BP; 4 A; 6 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2210 ATGGGAGACTCTTTGAA 2226  
||| ||||| ||||| |||||  
Db 17 ATGAGAGACTCTTTGAA 1

RESULT 4764  
ACF39518/c

ID ACF39518 standard; DNA; 20 BP.  
XX  
AC ACF39518;  
XX  
DT 26-SEP-2003 (first entry)  
XX  
DE BARCODE-MAT HPV related GPVP1 probe HPV33L1.  
XX  
KW Simultaneous detection; multiple target nucleic acid molecule;  
KW biological sample; Exonuclease I; PCR; human papillomavirus; HPV;  
KW BARCODE-MT; acute lymphoblastic leukaemia; cancer; assay;  
KW bead array coded detection of multiple target; microarray;  
KW targeted genetic risk-stratification; primer; probe; ss.  
XX  
OS Human papillomavirus.  
OS Synthetic.  
XX  
PN WO2003054149-A2.  
XX  
PD 03-JUL-2003.  
XX  
PF 06-DEC-2002; 2002WO-US039223.  
XX  
PR 07-DEC-2001; 2001US-0338442P.  
PR 05-NOV-2002; 2002US-0423793P.  
XX  
PA (UYMA-) UNIV MASSACHUSETTS.  
XX  
PI Pihan G;  
XX  
DR WPI; 2003-559133/52.  
XX  
PT Simultaneously detecting the presence of multiple target nucleic acid  
PT molecules in a biological sample for optimizing risk-adapted therapy for  
PT a disorder by treating the enriched target nucleic acid molecules with  
PT Exonuclease I.  
XX  
PS Example 2; Fig 7; 41pp; English.  
XX  
CC The present invention describes a method for simultaneously detecting the  
CC presence of multiple target nucleic acid molecules in a biological sample  
CC comprising: (a) isolating and enriching target nucleic acid molecules  
CC from the biological sample; (b) treating the enriched target nucleic acid  
CC molecules with Exonuclease I; (c) performing linear PCR on the  
CC Exonuclease I treated enriched target nucleic acid molecule to produce  
CC linear PCR product where only a single primer is used; (d) obtaining  
CC beads coupled to an oligonucleotide molecule complementary to the  
CC amplified target nucleic acid molecules; (e) forming a mixture by mixing  
CC the beads and the enriched linear PCR product nucleic acid; (f) forming a  
CC reacted sample by incubating the mixture under conditions where if the  
CC enriched linear PCR product includes the target nucleic acid molecule,  
CC the enriched linear PCR product will hybridise to the oligonucleotide  
CC molecule; (g) analysing the reacted sample by determining the  
CC fluorescence of each bead analysed; and (h) detecting a level of  
CC fluorescence on the beads, where the level of fluorescence corresponds to  
CC a level of a target nucleic acid molecule in the biological sample. The  
CC method for simultaneously detecting the presence of multiple target  
CC nucleic acid molecules in a biological sample or for optimising risk-  
CC adapted therapy for a disorder associated with the target nucleic acid.  
CC ACF39439 to ACF39597 represent primers and probes used in the  
CC exemplification of the present invention  
XX  
SQ Sequence 20 BP; 11 A; 5 C; 2 G; 2 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2347 TGGAGGTTCTGTATTTT 2363  
||||| ||||| ||||| |||||  
Db 17 TGGAGGTACTGTATTTT 1



RESULT 4765  
ACD99446  
ID ACD99446 standard; DNA; 20 BP.  
XX  
XX  
AC ACD99446;  
XX  
DT 25-SEP-2003 (first entry)  
XX  
DE Immunostimulatory nucleic acid #132.  
XX  
KW Immunostimulatory; antiinflammatory; dermatological; antipsoriatic;  
KW antiulcer; gene therapy; vaccine; non-allergic inflammatory disease;  
KW psoriasis; eczema; allergic contact dermatitis; latex dermatitis;  
KW inflammatory bowel disease; ulcerative colitis; Crohn's disease; ss.  
XX  
OS Synthetic.  
XX  
PN US2003050268-A1.  
XX  
PD 13-MAR-2003.  
XX  
PF 29-MAR-2002; 2002US-00112653.  
XX  
PR 29-MAR-2001; 2001US-0279642P.  
XX  
PA (KRIE/) KRIEG A M.  
PA (BERG/) BERG D J.  
XX  
PI Krieg AM, Berg DJ;  
XX  
DR WPI; 2003-521815/49.  
XX  
PT Treating non-allergic inflammatory diseases, such as psoriasis, eczema,  
PT allergic contact dermatitis, latex dermatitis or inflammatory bowel  
PT disease by administering an immunostimulatory nucleic acid.  
XX  
PS Disclosure; Page 12; 229pp; English.  
XX  
CC The invention describes a method of treating non-allergic inflammatory  
CC disease comprising administering to a subject having or at risk of  
CC developing a non-allergic inflammatory disease an immunostimulatory  
CC nucleic acid for prevention or treatment of the disease. The method is  
CC useful for treating non-allergic inflammatory diseases, such as  
CC psoriasis, eczema, allergic contact dermatitis, latex dermatitis or  
CC inflammatory bowel disease e.g., ulcerative colitis or Crohn's disease.  
CC This sequence represents an immunostimulatory nucleic acid  
XX  
SQ Sequence 20 BP; 0 A; 10 C; 10 G; 0 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
XX  
QY 520 CGGGCGCCCGCGCGCC 536  
Db 2 CGGGCGCCCGCGCGCC 18  
RESULT 4766  
ACD99446/c  
ID ACD99446 standard; DNA; 20 BP.  
XX  
XX  
AC ACD99446;  
XX  
DT 25-SEP-2003 (first entry)  
XX  
DE Immunostimulatory nucleic acid #132.  
XX  
KW Immunostimulatory; antiinflammatory; dermatological; antipsoriatic;  
KW antiulcer; gene therapy; vaccine; non-allergic inflammatory disease;  
KW psoriasis; eczema; allergic contact dermatitis; latex dermatitis;  
KW inflammatory bowel disease; ulcerative colitis; Crohn's disease; ss.  
XX

OS Synthetic.  
XX  
PN US2003050268-A1.  
XX  
PD 13-MAR-2003.  
XX  
PF 29-MAR-2002; 2002US-00112653.  
XX  
PR 29-MAR-2001; 2001US-0279642P.  
XX  
PA (KRIE/) KRIEG A M.  
PA (BERG/) BERG D J.  
PI Krieg AM, Berg DJ;  
XX  
DR WPI; 2003-521815/49.  
XX  
PT Treating non-allergic inflammatory diseases, such as psoriasis, eczema,  
PT allergic contact dermatitis, latex dermatitis or inflammatory bowel  
PT disease by administering an immunostimulatory nucleic acid.  
XX  
PS Disclosure; Page 12; 229pp; English.  
XX  
CC The invention describes a method of treating non-allergic inflammatory  
CC disease comprising administering to a subject having or at risk of  
CC developing a non-allergic inflammatory disease an immunostimulatory  
CC nucleic acid for prevention or treatment of the disease. The method is  
CC useful for treating non-allergic inflammatory diseases, such as  
CC psoriasis, eczema, allergic contact dermatitis, latex dermatitis or  
CC inflammatory bowel disease e.g., ulcerative colitis or Crohn's disease.  
CC This sequence represents an immunostimulatory nucleic acid  
XX  
SQ Sequence 20 BP; 0 A; 10 C; 10 G; 0 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
XX  
QY 520 CGGGCGCCCGCGCGCC 536  
Db 19 CGGGCGCCCGCGCGCC 3  
RESULT 4767  
ACD05095/c  
ID ACD05095 standard; DNA; 20 BP.  
XX  
AC ACD05095;  
XX  
DT 05-AUG-2003 (first entry)  
XX  
DE Tumour necrosis factor alpha antisense oligonucleotide #98.  
XX  
KW Tumour necrosis factor alpha; TNF-alpha; antiinflammatory; antirheumatic;  
KW antiarthritic; antidiabetic; dermatological; hepatotropic; antiasthmatic;  
KW inflammatory disorder; inflammatory bowel disease; Crohn's disease;  
KW colitis; rheumatoid arthritis; diabetes; pancreatitis;  
KW multiple sclerosis; atopic dermatitis; asthma; hepatitis;  
KW antisense technology; ss.  
XX  
OS Synthetic.  
XX  
PN US2003022848-A1.  
XX  
PD 30-JAN-2003.  
XX  
PF 02-APR-2001; 2001US-00824322.  
XX  
PR 05-OCT-1998; 98US-00166186.  
PR 18-MAY-1999; 99US-00313932.  
XX  
PA (BAKE/) BAKER B F.  
PA (BENN/) BENNETT C F.

PA (BUTL/) BUTLER M M.  
PA (SHAN/) SHANAHAN W R.  
XX Baker BF, Bennett CF, Butler MM, Shanahan WR;  
XX WPI; 2003-447433/42.  
XX  
PT Treating inflammatory disorders such as inflammatory bowel disease,  
PT Crohn's disease or rheumatoid arthritis, in a subject, by administering  
PT oligonucleotide which inhibits expression of human tumor necrosis factor  
PT alpha.  
XX Example 8; Page 24; 142pp; English.  
PS  
XX The invention describes a method of treating an inflammatory disorder in  
CC an individual, comprising administering to the individual an  
CC oligonucleotide upto 30 nucleotides in length complementary to a nucleic  
CC acid molecule encoding human tumor necrosis factor (TNF)-alpha. The  
CC method is useful for treating an inflammatory disorder such as  
CC inflammatory bowel disease, Crohn's disease, colitis or rheumatoid  
CC arthritis, in an individual. The method is also useful for treating  
CC diabetes, pancreatitis, multiple sclerosis, atopic dermatitis, asthma,  
CC and hepatitis in an individual. This sequence represents an antisense  
CC oligonucleotide used to modulate expression of tumour necrosis factor  
CC alpha (TNF-alpha)  
XX  
SQ Sequence 20 BP; 1 A; 5 C; 8 G; 6 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 453 CAGGCAGCCAGCAGCAG 469  
Db 20 CAGCCAGCCAGCAGAG 4  
  
RESULT 4768  
ADB36516  
ID ADB36516 standard; DNA; 20 BP.  
XX  
AC ADB36516;  
XX  
DT 04-DEC-2003 (first entry)  
XX  
DE Immunostimulatory nucleic acid #130.  
XX  
KW ds; allergy; asthma; poly-G nucleic acid; aerosol formulation;  
KW hypo-responsive subject; immunostimulatory.  
XX  
OS Synthetic.  
XX  
PN US2003087848-A1.  
XX  
PD 08-MAY-2003.  
XX  
PF 02-FEB-2001; 2001US-00776479.  
XX  
PR 03-FEB-2000; 2000US-0179991P.  
XX  
PA (BRAT/) BRATZLER R L.  
PA (PETE/) PETERSEN D M.  
PA (FOUR/) FOURON Y.  
XX  
PI Bratzler RL, Petersen DM, Fouron Y;  
XX  
DR WPI; 2003-657977/62.  
XX  
PT Treating and/or preventing allergy or asthma using an immunostimulatory  
PT nucleic acid alone or in combination with an asthma/allergy medicament.  
XX  
OS Synthetic.  
XX  
PN US2003087848-A1.  
XX  
PD 08-MAY-2003.  
XX  
PF 02-FEB-2001; 2001US-00776479.  
XX  
PR 03-FEB-2000; 2000US-0179991P.  
XX  
PA (BRAT/) BRATZLER R L.  
PA (PETE/) PETERSEN D M.  
PA (FOUR/) FOURON Y.  
XX  
PI Bratzler RL, Petersen DM, Fouron Y;  
XX  
DR WPI; 2003-657977/62.  
XX  
PT Treating and/or preventing allergy or asthma using an immunostimulatory  
PT nucleic acid alone or in combination with an asthma/allergy medicament.  
XX  
PS Disclosure; Page 7; 221pp; English.

CC The invention relates to a method of treating or preventing allergy or  
CC asthma which comprises administering to a subject a poly-G nucleic acid  
CC in an aerosol formulation. The methods and compositions of the present  
CC invention are useful for diagnosing and/or treating asthma and allergy  
CC especially in a hypo-responsive subject. The present sequence represents  
CC an immunostimulatory nucleic acid of the invention.  
XX  
SQ Sequence 20 BP; 0 A; 10 C; 10 G; 0 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 520 CGGGCGCCCGCGCGGCC 536  
Db 2 CGGCCGGCCCGCGCGGCC 18  
  
RESULT 4769  
ADB36516/c  
ID ADB36516 standard; DNA; 20 BP.  
XX  
AC ADB36516;  
XX  
DT 04-DEC-2003 (first entry)  
XX  
DE Immunostimulatory nucleic acid #130.  
XX  
KW ds; allergy; asthma; poly-G nucleic acid; aerosol formulation;  
KW hypo-responsive subject; immunostimulatory.  
XX  
OS Synthetic.  
XX  
PN US2003087848-A1.  
XX  
PD 08-MAY-2003.  
XX  
PF 02-FEB-2001; 2001US-00776479.  
XX  
PR 03-FEB-2000; 2000US-0179991P.  
XX  
PA (BRAT/) BRATZLER R L.  
PA (PETE/) PETERSEN D M.  
PA (FOUR/) FOURON Y.  
XX  
PI Bratzler RL, Petersen DM, Fouron Y;  
XX  
DR WPI; 2003-657977/62.  
XX  
PT Treating and/or preventing allergy or asthma using an immunostimulatory  
PT nucleic acid alone or in combination with an asthma/allergy medicament.  
XX  
OS Disclosure; Page 7; 221pp; English.  
XX  
CC The invention relates to a method of treating or preventing allergy or  
CC asthma which comprises administering to a subject a poly-G nucleic acid  
CC in an aerosol formulation. The methods and compositions of the present  
CC invention are useful for diagnosing and/or treating asthma and allergy  
CC especially in a hypo-responsive subject. The present sequence represents  
CC an immunostimulatory nucleic acid of the invention.  
XX  
SQ Sequence 20 BP; 0 A; 10 C; 10 G; 0 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 520 CGGGCGCCCGCGCGGCC 536  
Db 19 CGGCCGGCCCGCGCGGCC 3  
  
RESULT 4770

ADB74233  
ID ADB74233 standard; DNA; 20 BP.  
XX  
AC ADB74233;  
XX  
DT 04-DEC-2003 (first entry)  
XX  
DE Human GPR34 PCR primer, SEQ ID 5.  
XX  
KW Nootropic; Neuroprotective; Immunomodulator; Antiinflammatory; Antiulcer;  
KW GPR34; neurodegenerative disease; immunopathy; inflammatory disease;  
KW peptic ulcer; nerve growth factor; human; PCR; primer; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO2003052414-A1.  
XX  
PD 26-JUN-2003.  
XX  
PF 13-DEC-2002; 2002WO-JP013096.  
XX  
PR 14-DEC-2001; 2001JP-00382174.  
PR 09-JUL-2002; 2002JP-00200556.  
XX  
PA (TAKE ) TAKEDA CHEM IND LTD.  
XX  
PI Mori M, Chikatsu T, Sato S, Nagi T, Sugo T;  
XX  
DR WPI; 2003-636554/60.  
XX  
PT Screening compounds used for treating neurodegenerative diseases,  
PT immunopathy, inflammatory diseases and peptic ulcer involves using  
PT protein and ligand.  
XX  
PS Example 1; Page 150; 169pp; Japanese.  
XX  
CC The present invention relates to a method for screening compounds or  
CC their salts capable of changing the binding properties of a GPR34 protein  
CC to a ligand capable of binding specifically to the protein. The method is  
CC useful for screening compounds used for treating neurodegenerative  
CC diseases, immunopathy, inflammatory diseases and peptic ulcers, and as  
CC enhancers of nerve growth factor. The present sequence is a PCR primer,  
CC used in an example from the invention.  
XX  
SQ Sequence 20 BP; 4 A; 6 C; 5 G; 5 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 457 CAGCCAGCAGCAGGCCT 473  
Db 2 CAGTCAGCAGCTGGCCT 18  
  
RESULT 4771  
ADC65850  
ID ADC65850 standard; DNA; 20 BP.  
XX  
AC ADC65850;  
XX  
DT 18-DEC-2003 (first entry)  
XX  
DE Mouse TGF-beta receptor II targeted antisense oligonucleotide #49.  
XX  
KW mouse; antisense oligonucleotide;  
KW transforming growth factor beta receptor II; TGF-beta receptor II;  
KW hyperproliferative disorder; breast cancer; autoimmune disorder;  
KW rheumatoid arthritis; 2'-O-methoxyethyl gapmer;  
KW phosphorothioate backbone; ss; murine.  
XX  
OS Mus musculus.  
XX

PN WO20C3000656-A2.  
XX  
PD 03-JAN-2003.  
XX  
PF 19-JUN-2002; 2002WO-US019665.  
XX  
PR 21-JUN-2001; 2001US-00888361.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Murray SF, Wyatt JR;  
XX  
DR WPI; 2003-175279/17.  
XX  
PT New compound having a sequence targeted to a nucleic acid encoding  
PT Transforming growth factor beta-receptor II, useful for preparing a  
PT composition for treating hyperproliferative disorder e.g., lung, liver,  
PT colon or gastric cancer.  
XX  
PS Claim 3; SEQ ID NO 146; 141pp; English.  
XX  
CC The invention comprises antisense oligonucleotides that are targeted to  
CC the nucleic acid encoding transforming growth factor beta (TGF-beta)  
CC receptor II. The antisense oligonucleotides of the invention are useful  
CC for treating: hyperproliferative disorders (e.g. breast cancer), or an  
CC autoimmune disorder (e.g. rheumatoid arthritis). The present DNA sequence  
CC represents a 2'-O-methoxyethyl gapmer oligonucleotide with a  
CC phosphorothioate backbone that is targeted to mouse TGF-beta receptor II.  
XX  
SQ Sequence 20 BP; 4 A; 7 C; 5 G; 4 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 624 CACACGCCCTGGATGCC 640  
Db 1 CACACGATCTGGATGCC 17  
  
RESULT 4772  
AAD61201  
ID AAD61201 standard; DNA; 20 BP.  
XX  
AC AAD61201;  
XX  
DT 15-JAN-2004 (first entry)  
XX  
DE Human Ship-1 antisense oligonucleotide ISIS #168282.  
XX  
KW Human; Ship-1; SH2-containing phosphatidylinositol phosphatase-1; INPP5D;  
KW insensitivity to apoptotic signal; developmental disorder; inflammation;  
KW immunosuppressive; autoimmune disorder; antisense therapy; antisense;  
KW phosphorothioate backbone; ss.  
XX  
OS Homo sapiens.  
OS Synthetic.  
XX  
FH Key Location/Qualifiers  
FT modified\_base 1..20  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "Phosphorothioate backbone; All cytidines are 5-  
FT methyl cytidines"  
FT modified\_base 1..5  
FT /\*tag= b  
FT /mod\_base= OTHER  
FT /note= "2'-O-methoxyethyl (2'-MOE) nucleotides"  
FT modified\_base 16..20  
FT /\*tag= c  
FT /mod\_base= OTHER  
FT /note= "2'-O-methoxyethyl (2'-MOE) nucleotides"  
XX

PN US2003114401-A1.  
XX  
PD 19-JUN-2003.  
XX  
PF 06-DEC-2001; 2001US-00003919.  
XX  
PR 06-DEC-2001; 2001US-00003919.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Bennett CF, Freier SM;  
XX  
DR WPI; 2003-801302/75.  
XX  
PT Antisense compounds targeted to nucleic acid molecule encoding Ship-1,  
PT useful for treating diseases associated with expression of Ship-1, such  
PT as autoimmune and developmental disorders.  
XX  
PS Claim 3; Page 25; Opp; English.  
XX  
CC The present invention provides antisense compounds targetted to nucleic  
CC acid molecule encoding Ship-1 (also known as SH2-containing  
CC phosphatidylinositol phosphatase-1 and INPP5D) to modulate/inhibit the  
CC expression of Ship-1. The invention is useful in treatment of diseases  
CC such as insensitivity to apoptotic signals, autoimmune disorders,  
CC developmental disorders and inflammatory disorders. The present sequence  
CC is human Ship-1 antisense oligonucleotide  
XX  
SQ Sequence 20 BP; 1 A; 7 C; 3 G; 9 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1785 CCCCATTCCTTTCTTCT 1801  
Db ||||| |||||  
2 CCCCATGTTTCTTCT 18  
RESULT 4773  
ADE43707/c  
ID ADE43707 standard; DNA; 20 BP.  
XX  
AC ADE43707;  
XX  
DT 29-JAN-2004 (first entry)  
XX  
DE Human KNSL1 sequencing primer, SEQ ID 312.  
XX  
KW Neurodegenerative disease; uPA; SNCG; IDE; KNSL1; LIPA; TNFRSF6;  
KW Alzheimer's disease; neuroprotective; nootropic; gene therapy;  
KW Chromosome 10; PCR; primer; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO2003054143-A2.  
XX  
PD 03-JUL-2003.  
XX  
PF 25-OCT-2002; 2002WO-US034679.  
XX  
PR 25-OCT-2001; 2001US-0339525P.  
PR 08-NOV-2001; 2001US-0336929P.  
PR 08-NOV-2001; 2001US-0338010P.  
PR 09-NOV-2001; 2001US-0338363P.  
PR 04-DEC-2001; 2001US-0337052P.  
PR 28-MAR-2002; 2002US-0368919P.  
XX  
PA (NEUR-) NEUROGENETICS INC.  
PA (GEO) GEN HOSPITAL CORP.  
XX  
PI Becker KD, Velicelebi G, Elliott KJ, Wang X, Tanzi RE, Bertram L;  
PI Saunders AJ, Mullin KM, Sampson AJ, Blacker DL;

XX WPI; 2003-559131/52.  
XX  
PT Determining a predisposition for or the occurrence of neurodegenerative  
PT disease, e.g. Alzheimer's disease by detecting in a target nucleic acid  
PT the presence or absence of an allelic variant of one or more polymorphic  
PT regions.  
XX  
PS Example 3; Page 291; 848pp; English.  
XX  
CC The present invention relates to a method (M1) for determining a  
CC predisposition for or the occurrence of neurodegenerative disease in a  
CC subject. The method comprises detecting in a target nucleic acid obtained  
CC from the subject the presence or absence of an allelic variant of one or  
CC more polymorphic regions of one or more genes selected from uPA  
CC (Urokinase plasminogen activator), SNCG (gamma-synuclein), IDE (insulin-  
CC degrading enzyme), KNSL1 (Kinesin-like protein 1), LIPA (lysosomal acid  
CC lyase), and TNFRSF6 (Tumour Necrosis Factor Receptor-SF6), where the  
CC presence of at least one of the allelic variant of one or more  
CC polymorphic regions is indicative of a predisposition for or the  
CC occurrence of neurodegenerative disease. The genes are all located on  
CC chromosome 10. M1 is useful for determining a predisposition for or the  
CC occurrence of, and for treating neurodegenerative disease, particularly  
CC Alzheimer's disease. The present sequence is a PCR primer, which was used  
CC in the method of the invention.  
XX  
SQ Sequence 20 BP; 8 A; 5 C; 5 G; 2 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 20;  
Best Local Similarity 88.2%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 2710 CTCTGCCCTGTAATGTT 2726  
Db ||||| |||||  
19 CTGGCCTGTAATGTT 3  
RESULT 4774  
ADE14470  
ID ADE14470 standard; DNA; 20 BP.  
XX  
AC ADE14470;  
XX  
DT 29-JAN-2004 (first entry)  
XX  
DE HSD11B1 antisense oligonucleotide seq id 72.  
XX  
KW osteopathic; antidepressant; anorectic; antidiabetic;  
KW antiarteriosclerotic; antilipemic; antisense-therapy;  
KW hydroxysteroid 11-beta dehydrogenase 1; osteoporosis; depression;  
KW metabolic disorder; obesity; HSD11B1; diabetes; atherosclerosis;  
KW hyperlipidaemia; antisense technology; mouse; ss.  
XX  
OS Mus sp.  
XX  
PN US2003198965-A1.  
XX  
PD 23-OCT-2003.  
XX  
PF 19-APR-2002; 2002US-00126355.  
XX  
PR 19-APR-2002; 2002US-00126355.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Freier SM;  
XX  
DR WPI; 2003-852782/79.  
XX  
PT New antisense compounds useful for treating disorders associated with  
PT hydroxysteroid 11-beta dehydrogenase 1 expression, such as osteoporosis,  
PT depression and metabolic disorders like obesity, diabetes and  
PT atherosclerosis.



XX Example 16; SEQ ID NO 72; 53pp; English.

PS The invention describes a compound (I) 8-80 nucleobases in length

XX targeted to a nucleic acid molecule encoding hydroxysteroid 11-beta

CC dehydrogenase 1, inhibiting expression of hydroxysteroid 11-beta

CC dehydrogenase 1. The methods and compositions of the present invention

CC are useful for treating disorders associated with hydroxysteroid 11-beta

CC dehydrogenase 1 expression, such as osteoporosis, depression and

CC metabolic disorders like obesity, diabetes, atherosclerosis and

CC hyperlipidaemia. This sequence represents an antisense oligonucleotide

CC used to control the expression of mouse hydroxysteroid 11-beta

XX dehydrogenase 1.

XX Sequence 20 BP; 4 A; 5 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 20;

Best Local Similarity 88.2%; Pred. No. 4.3e+03;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2454 ACATGGGATCCCAATTTT 2470

Db 1 ACATGGGCTCCCAATTTT 17

RESULT 4775

AAZ26714

ID AAZ26714 standard; DNA; 21 BP.

XX AAZ26714;

AC AAZ26714;

XX 30-NOV-1999 (first entry)

DT Human polymorphic region 903.

DE Polymorphism; human; inhibitor; cancer; treatment; cell growth; LOH;

XX cell viability; loss of heterozygosity; precancerous condition; ASI;

KW allele specific inhibitor; somatic cell; diagnosis; prevention;

KW atherosclerotic plaque; premalignant metaplastic lesion; endometriosis;

KW dysplastic lesion; benign tumour; polycystic kidney disease; transplant;

KW graft versus host disease; malignant cell removal; bone marrow; ss.

XX Homo sapiens.

OS WO9841648-A2.

XX 24-SEP-1998.

PD 19-MAR-1998; 98WO-US005419.

PF 20-MAR-1997; 97US-0041057P.

XX (VARI-) VARIAGENICS INC.

PA Housman D, Ledley FD, Stanton VP;

XX WPI; 1998-521232/44.

DR Identifying target genes for allele-specific drugs - used for diagnosis,

PT prevention and treatment of, e.g. cancers, atherosclerotic plaque,

PT dysplastic lesions, endometriosis or graft versus host disease.

XX Disclosure; Fig 7; 605pp; English.

PS This invention describes a novel method for identifying an inhibitor

XX potentially useful for treatment of cancer, where the inhibitor is active

CC on a gene vital for cell growth or viability, and where the gene is

CC subject to loss of heterozygosity (LOH) in a cancer. The inhibitor is

CC used for preventing the development of cancer in a patient having a

CC precancerous condition, by administering to the patient a first allele

CC specific inhibitor (ASI) targeted to an allele of a first essential gene

CC present in cells of the precancerous condition, where the normal somatic

CC cells of the patient are heterozygous for the first gene, the inhibitor

CC is active on at least one but less than all allelic forms of the gene

CC present in a population and targets only one allelic form present in the

CC normal somatic cells, and the first gene. The products and methods can be

CC used in the diagnosis, prevention and treatment of LOH disorders, e.g.

CC cancers, atherosclerotic plaques, premalignant metaplastic or dysplastic

CC lesions, benign tumours, endometriosis, polycystic kidney disease, and

CC graft versus host disease. The method can also be used to remove

CC malignant cells from bone marrow transplants. AAZ25812-Z26825 represent

CC human polymorphic sites described in the method of the invention

XX Sequence 21 BP; 15 A; 3 C; 1 G; 2 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 21;

Best Local Similarity 88.2%; Pred. No. 4.5e+03;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2786 AAAAAAAAAAAAAAA 2802

Db 5 AACATAAAAAAAAAAAAA 21

RESULT 4776

AAQ10724

ID AAQ10724 standard; DNA; 21 BP.

XX AAQ10724;

AC AAQ10724;

XX 08-APR-1991 (first entry)

DT Mutagenising oligonucleotide used in prodn. of EPO mutein 47.

XX Erythropoietin; erythrocytes; renal anaemia; ss.

OS Synthetic.

XX EP409113-A.

PN 23-JAN-1991.

XX 14-JUL-1990; 90EP-00113505.

PF 20-JUL-1989; 89DE-03923963.

XX (BEHW ) BEHRINGWERKE AG.

PA Fibi M, Zettlmeiss G, Kupper H;

XX WPI; 1991-023737/04.

DR Human erythropoietin mutants and DNA encoding them - for stimulation of

PT erythroid precursor cells and binding of erythrocytes to receptors.

XX Disclosure; Page 10; 22pp; German.

XX This oligonucleotide is used in the prodn. of an erythropoietin mutein,

CC EPO 47 which has 2 substitutions in the wild-type sequence (Arg 76 and

CC Gln 78 are replaced by Ala). This mutein has differing biological

CC properties from wild-type EPO and is useful in the treatment of renal

CC anaemia and conditions where it is necessary to change erythrocyte no.

CC and/or improve erythrocyte quality. Hypertensive activity is also

CC modified. See also AAQ10697-Q10723 and AAQ10725-Q10726

XX Sequence 21 BP; 3 A; 10 C; 8 G; 0 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 21;

Best Local Similarity 88.2%; Pred. No. 4.5e+03;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 479 GGCCGCCAGCCAGCA 495

Db 4 GGCCGCCCGCCAGCA 20

RESULT 4777  
AAQ22345  
ID AAQ22345 standard; DNA; 21 BP.  
XX AC AAQ22345;  
XX DT 08-JUL-1992 (first entry)  
XX DE Antisense oligonucleotide #38 targetted to ELAM-1 3'-UTR (2760-2788).  
XX KW Human; endothelial leukocyte adhesion molecule-1; inhibitor;  
XX KW phosphorothioate bond; triple helix; translation initiation; ss.  
XX OS Synthetic.  
XX PN WO9203139-A.  
XX PD 05-MAR-1992.  
XX PF 23-JUL-1991; 91WO-US005209.  
XX PR 14-AUG-1990; 90US-00567286.  
XX PA (ISIS-) ISIS PHARM INC.  
XX PI Bennett CF, Mirabelli CK, Mira;  
XX DR WPI; 1992-096579/12.  
XX PT New oligonucleotides hybridisable to cell adhesion modulators - for  
XX PT treatment and diagnosis of e.g. allograft rejection, cancer, AIDS etc.  
XX PT and diagnosis of intercellular adhesion dysfunction.  
XX PS Example 12; Page 50; 75pp; English.  
XX CC Oligonucleotide #38 was designed to hybridise to the 3'-UTR of human ELAM  
CC -1 and was synthesised in the phosphorothioate form. It was one of 12  
CC different antisense oligonucleotides (AAQ22656-Q22662 and AAQ22342-  
CC Q22346) which target the ELAM-1 sequence. The most potent modulator of  
CC ELAM-1 activity was hybridisable with specific sequences in the 5'-UTR of  
CC ELAM-1 (i.e. AAQ22661)  
XX SQ Sequence 21 BP; 8 A; 3 C; 6 G; 4 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 88.2%; Pred. No. 4.5e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 2489 TGATGGGGTAATCTATA 2505  
Db 5 TGAGGGGGTAATCTACA 21  
RESULT 4778  
AAQ28771/c  
ID AAQ28771 standard; DNA; 21 BP.  
XX AC AAQ28771;  
XX DT 25-MAR-2003 (revised)  
XX DT 26-FEB-1993 (first entry)  
XX DE HLA Class II gene locus primer DRB30.  
XX KW MHC genotype; human leukocyte antigen; major histocompatibility complex;  
XX KW automated determination; ss.  
XX OS Synthetic.  
XX PN WO9215711-A1.  
XX PD 17-SEP-1992.  
XX CC

RESULT 4779  
AAQ24706/c  
ID AAQ24706 standard; DNA; 21 BP.  
XX AC AAQ24706;  
XX DT 25-MAR-2003 (revised)  
XX DT 17-DEC-2001 (revised)  
XX DT 10-NOV-1992 (first entry)  
XX DE J-beta-1b primer.  
XX KW Inv(7); PCR; polymerase chain reaction; ataxiatelangiectasia; AT;  
XX KW lymphoid malignancy; pesticide; herbicide; Nijmegen breakage syndrome;  
XX KW ss.  
XX OS Synthetic.  
XX PN USN7683685-N.  
XX PD 18-FEB-1992.  
XX PF 11-APR-1991; 91US-00683685.  
XX PR 11-APR-1991; 91US-00683685.  
XX PA (USSH ) US DEPT HEALTH & HUMAN SERVICE.  
XX PI Kirsch IR, Lipkowitz S, Stern MH;  
XX DR WPI; 1992-166775/20.  
XX PT Identifying individuals at increased risk of lymphoid leukemia and  
XX PT lymphoma - using DNA from immune receptor locus capable of displaying  
XX PT genomic instability.  
XX PS Disclosure; Page 15; 55pp; English.  
XX CC The sequences given in AAQ24701-Q24713 are a set of PCR primers which are

PF 04-MAR-1992; 92WO-US001675.  
XX  
PR 06-MAR-1991; 91US-00665960.  
PR 18-FEB-1992; 92US-00833668.  
XX  
PA (MINU ) UNIV MINNESOTA.  
XX  
PI Santamaria P, Boyce-Jacino MT, Barbosa JJ, Rich SS, Faras AJ;  
XX WPI; 1992-331755/40.  
XX Fully automated determ. of MHC genotype - by isolating nucleic acid from  
PT sample, amplifying nucleic acid by PCR to sequence alleles and analysing  
PT sequenced prods.  
XX  
PS Example; Page 20; 105pp; English.  
XX  
CC The sequence is that of a primer used as part of a method for determining  
CC the major histocompatibility complex (MHC) genotype of a subject in a  
CC sample. The primer anneals to nucleotides 97-103 of HLA class II locus  
CC DRB1/3/4/5. See also AAQ28761-Q28800 and AAQ28811-Q28819. (Updated on 25-  
CC MAR-2003 to correct PN field.)  
XX  
SQ Sequence 21 BP; 7 A; 5 C; 5 G; 4 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 88.2%; Pred. No. 4.5e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 2652 CCTAAGGTGAGTGTGCA 2668  
Db 21 CCTAAGGTGACTGTGTA 5  
RESULT 4779  
AAQ24706/c  
ID AAQ24706 standard; DNA; 21 BP.  
XX AC AAQ24706;  
XX DT 25-MAR-2003 (revised)  
XX DT 17-DEC-2001 (revised)  
XX DT 10-NOV-1992 (first entry)  
XX DE J-beta-1b primer.  
XX KW Inv(7); PCR; polymerase chain reaction; ataxiatelangiectasia; AT;  
XX KW lymphoid malignancy; pesticide; herbicide; Nijmegen breakage syndrome;  
XX KW ss.  
XX OS Synthetic.  
XX PN USN7683685-N.  
XX PD 18-FEB-1992.  
XX PF 11-APR-1991; 91US-00683685.  
XX PR 11-APR-1991; 91US-00683685.  
XX PA (USSH ) US DEPT HEALTH & HUMAN SERVICE.  
XX PI Kirsch IR, Lipkowitz S, Stern MH;  
XX DR WPI; 1992-166775/20.  
XX PT Identifying individuals at increased risk of lymphoid leukemia and  
XX PT lymphoma - using DNA from immune receptor locus capable of displaying  
XX PT genomic instability.  
XX PS Disclosure; Page 15; 55pp; English.  
XX CC The sequences given in AAQ24701-Q24713 are a set of PCR primers which are

CC complementary to a sequence within a 2000bp inversion of chromosome 7  
CC .This inversion (inv(7)(p14q35)) is found in normal people but patients  
CC suffering from the disease ataxiatelangiectasia (AT) have a 70-100 fold  
CC increase of the T-lymphocyte specific inversion inv(7). Using these  
CC sequences a screening test has been developed which can accurately  
CC measure lymphocyte-specific genomic instability and by extrapolation thus  
CC identifies individuals at increased risk for the development of lymphoid  
CC malignancy eg. after exposure to a pesticide or herbicide. This method  
CC can also be used for identifying (specifically pre-natal) an individual  
CC homozygous or heterozygous for AT and related syndromes (eg Nijmegen  
CC breakage syndrome) or for identifying carcinogenic compounds. (Note:  
CC Revised entry submitted to correct the patent number format of US  
CC Government-owned NTRIS applications to prevent clashes with ongoing US  
CC granted patent numbers. For further information please visit the Derwent  
CC web site at [www.derwent.com/dwpi/updates/ntis.us.html](http://www.derwent.com/dwpi/updates/ntis.us.html).) (Updated on 25-  
CC MAR-2003 to correct PF field.) (Updated on 25-MAR-2003 to correct PA  
CC field.)  
XX  
SQ Sequence 21 BP; 6 A; 8 C; 5 G; 2 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 88.2%; Pred. No. 4.5e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 113 GGCTGGGGGATCCTGG 129  
Db 17 GACTCGGGGATCCTGG 1  
  
RESULT 4780  
AAT14900  
ID AAT14900 standard; cDNA to mRNA; 21 BP.  
XX  
AC AAT14900;  
XX  
DT 18-JUL-1996 (first entry)  
XX  
DE Primer 6 for 3' porcine zona pellucida gene amplification.  
XX  
KW PZP-3; porcine zona pellucida 3; contraceptive vaccine; antigen;  
KW PZP-3(258); primer; PCR; polymerase chain reaction; ss.  
XX  
OS Synthetic.  
XX  
PN JP06179698-A.  
XX  
PD 28-JUN-1994.  
XX  
PF 15-DEC-1992; 92JP-003533992.  
XX  
PR 15-DEC-1992; 92JP-003533992.  
XX  
PA (TOFU ) TONEN CORP.  
XX  
DR WPI; 1994-245693/30.  
XX  
PT pig zona pellucida-3 related peptide(s) - useful as contraceptive vaccine  
PT antigen.  
XX  
PS Example 1; Page 6; 14pp; Japanese.  
XX  
CC AAT14897-99 were each used with AAT14900 to PCR amplify DNA 3' of the  
CC recombinant PZP-3(258) partial porcine zona pellucida 3 gene. A 300 bp  
CC PCR product (AAT14901) was generated by all 3 PCR reactions. The  
CC recombinant protein, PZP-3(258) (AAR96951) corresponds to residues 106-  
CC 363 of PZP-3. Peptides wholly or partially related to PZP-3 (AAR96950),  
CC partic. between amino acids 106-363 (see AAR96951), are useful as  
CC contraceptive vaccine antigens for pigs. See AAT14895-908  
XX  
SQ Sequence 21 BP; 3 A; 3 C; 2 G; 13 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 88.2%; Pred. No. 4.5e+03;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 2161 TCTCCTTTTTTTTTTTT 2177  
Db 5 TCGACTTTTTTTTTTTT 21  
  
RESULT 4781  
AAQ55571  
ID AAQ55571 standard; DNA; 21 BP.  
XX  
AC AAQ55571;  
XX  
DT 25-MAR-2003 (revised)  
DT 17-AUG-1994 (first entry)  
XX  
DE Sequence of synthetic triplex forming oligo (TFO) B-133-54, anti-HSV 2  
DE TFO.  
XX  
KW Triplex forming oligonucleotide; TFO; sequence specific binding; ss.  
XX  
OS Synthetic.  
XX  
FH Key Location/Qualifiers  
FT misc\_feature 21  
FT /\*tag= a  
FT /label= G-cholesterol  
XX  
PN WO9404550-A1.  
XX  
PD 03-MAR-1994.  
XX  
PF 17-AUG-1993; 93WO-US007743.  
XX  
PR 21-AUG-1992; 92US-00934065.  
PR 23-APR-1993; 93US-00053040.  
XX  
PA (TRIP-) TRIPLEX PHARM CORP.  
PA (BAYU ) BAYLOR COLLEGE MEDICINE.  
XX  
PI Jayaraman K, Vu H, Zendequi J, Hogan ME;  
XX WPI; 1994-083097/10.  
DR  
XX  
PT New method of binding synthetic triplex forming oligonucleotide - in  
PT which the nucleotide is modified with a lipophilic cpd. is useful in  
PT treatment of cell proliferative states and viral infections.  
XX  
PS Example; Page 40; 86pp; English.  
XX  
CC Triplex forming oligos (TFOs) bind to DNA in a site selective manner. The  
CC biological effect of a TFO is potentiated by modification with lipophilic  
CC cpds., selected from cholesterol, vitamin E and 1,2-di-O- hexadecyl-3-  
CC glyceryl. TFO-linker-cholesterol is used for the treatment of cell  
CC proliferative states (breast, lung and cervical cancers) and in  
CC infections by viruses (Herpes simplex virus type 2 and human  
CC immunodeficiency virus (HIV)). (Updated on 25-MAR-2003 to correct PN  
CC field.)  
XX  
SQ Sequence 21 BP; 0 A; 0 C; 17 G; 4 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 88.2%; Pred. No. 4.5e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 106 GCTTGGGGCTGGGGG 122  
Db 4 GGTGGGGGTGGGGG 20  
  
RESULT 4782  
AAQ67230  
ID AAQ67230 standard; DNA; 21 BP.

XX AC AAQ67230;  
XX 25-MAR-2003 (revised)  
DT 22-SEP-1994 (first entry)  
XX Triple helix-forming oligonucleotide.  
DE Triple helix; oligonucleotide; TFO; lipophile; cholesterol; Vitamin E;  
XX glyceryl; anticancer; antiviral; herpes simplex; HIV; human;  
KW immunodeficiency virus.  
XX Synthetic.  
OS WO9404550-A1.  
XX 03-MAR-1994.  
PD 17-AUG-1993; 93WO-US007743.  
XX 21-AUG-1992; 92US-00934065.  
PR 23-APR-1993; 93US-00053040.  
XX (TRIP-) TRIPLEX PHARM CORP.  
PA (BAYU ) BAYLOR COLLEGE MEDICINE.  
XX Jayaraman K, Vu H, Zendegui J, Hogan ME;  
PI WPI; 1994-083097/10.  
DR New method of binding synthetic triplex forming oligonucleotide - in  
XX which the nucleotide is modified with a lipophilic cpd. is useful in  
PT treatment of cell proliferative states and viral infections.  
PT Claim 25; Page 40; 86pp; English.  
XX The invention relates to a method of enhancing sequence specific binding  
CC of a synthetic triplex-forming oligonucleotide (TFO) involving the step  
CC of contacting the TFO with a cell. The TFO comprises a nucleotide  
CC sequence of at least 20 nucleotides including a G and a T, is chemically  
CC modified with a lipophilic compound and is capable of binding to a DNA  
CC duplex target to form a triple helix. The lipophilic compound is  
CC preferably cholesterol, vitamin E or 1,2-di-O-hexadecyl 3-glyceryl and is  
CC joined to the nucleotide via a linker. The TFO is useful medically for  
CC treating cell proliferative states such as breast, lung and cervical  
CC cancers, and for treating viral infections such as caused by Herpes  
CC simplex, type 2 or HIV. The biological effect of the TFO is potentiated by  
CC modification with the lipophilic compound. The present sequence is one of  
CC 9 specific nucleotide sequences disclosed for use in forming the TFO  
CC (AAQ67224 - AAQ67232). The TFO is formed by attaching cholesterol to the  
CC 3' end. This TFO is active against HSV-2. (Updated on 25-MAR-2003 to  
CC correct PN field.)  
XX Sequence 21 BP; 0 A; 0 C; 17 G; 4 T; 0 U; 0 Other;  
SQ Query Match 0.5%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 88.2%; Pred. No. 4.5e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 106 GCTTGGGGGCTGGGGG 122  
DB 4 GGTGGGGGTGGGGG 20  
RESULT 4783  
AAQ44571  
ID AAQ44571 standard; DNA; 21 BP.  
XX AAQ44571;  
AC  
XX 25-MAR-2003 (revised)  
DT 26-SEP-1994 (first entry)  
XX

DE Antisense oligonucleotide which targets human ELAM-1 3'-UTR.  
XX Human endothelial leukocyte adhesion molecule; ELAM-1; cell adhesion;  
KW modulation; inflammation; psoriasis; malignant melanoma; inhibition;  
KW inflammatory bowel disease; antisense oligonucleotide; therapy; ss.  
XX Synthetic.  
OS Key Location/Qualifiers  
XX misc\_feature 1..21  
FT /\*tag= a  
FT /note= "in phosphorothioate form"  
XX WO9405333-A1.  
XX 17-MAR-1994.  
PD 27-AUG-1993; 93WO-US008101.  
XX 02-SEP-1992; 92US-00939855.  
PR 21-JAN-1993; 93US-00007997.  
PR 17-MAY-1993; 93US-00063167.  
XX (ISIS-) ISIS PHARM INC.  
XX Bennet CF, Mirabelli CK;  
PI WPI; 1994-100869/12.  
DR Oligo:nucleotide modulation of cell adhesion - used in the treatment of  
XX e.g. psoriasis, inflammatory bowel disease or malignant melanoma.  
PT Example 12; Page 57; 101pp; English.  
XX Antisense oligonucleotides which target human ELAM-1 were synthesised in  
CC the phosphorothioate form. Some of the oligonucleotides were found to  
CC inhibit ELAM-1 expression and so are useful to treat diseases which are  
CC modulated by changes in intercellular adhesion molecules. This sequence  
CC is designed to hybridise to nucleotides 2760-2788 of the 3'-untranslated  
CC region of human ELAM-1 coding sequence and is not one of the preferred  
CC inhibitory oligonucleotides. (Updated on 25-MAR-2003 to correct PN  
CC field.)  
XX Sequence 21 BP; 8 A; 3 C; 6 G; 4 T; 0 U; 0 Other;  
SQ Query Match 0.5%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 88.2%; Pred. No. 4.5e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 2489 TGATGGGGTAACTATA 2505  
DB 5 TGAGGGGGTAACTACA 21  
RESULT 4784  
AAQ79210  
ID AAQ79210 standard; DNA; 21 BP.  
XX AAQ79210;  
AC 25-MAR-2003 (revised)  
DT 17-JUL-1995 (first entry)  
XX Guanosine rich oligonucleotide used to treat viral infection.  
DE Guanosine; tetrad; inhibition; replication; virus; treatment; therapy;  
XX infection; herpes simplex virus; human papilloma virus;  
KW Epstein-Barr virus; HIV, adenovirus; respiratory syncytial virus;  
KW hepatitis B virus; human cytomegalovirus; ss.  
XX Synthetic.  
OS Key Location/Qualifiers  
XX





AAT01778  
ID AAT01778 standard; DNA; 21 BP.  
XX  
AC AAT01778;  
XX  
DT 22-DEC-1995 (first entry)  
XX  
DE Peptide nucleic acid oligomer targetting ELAM-1 3'-UTR.  
XX  
KW peptide nucleic acid; PNA; intercellular adhesion molecule; ICAM-1;  
KW endothelial leukocyte; ELAM-1; vascular; VCAM-1; antiinflammatory;  
KW anticancer; antimetastatic; anti-AIDS; anti-rhinoviral; ss.  
XX  
OS Synthetic.  
XX  
FH Key Location/Qualifiers  
FT misc\_feature 1..21  
FT /\*tag= a  
FT /note= "at least one (and preferably all) of the backbone  
FT subunits are composed of amide units, so that the  
FT oligomer consists of the nucleobases attached covalently  
FT to a polyamide backbone"  
XX  
PN WO9504749-A1.  
XX  
PD 16-FEB-1995.  
XX  
PF 05-AUG-1994; 94WO-US009026.  
XX  
PR 05-AUG-1993; 93US-00102650.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Bennett CF, Mirabelli CK;  
XX  
DR WPI; 1995-090842/12.  
XX  
PT New peptide nucleic acid oligomers hybridising to adhesion molecule genes  
PT - are stable anti:sense cpds. of high affinity, partic. for treating  
PT inflammation, viral infection, cancer etc.  
XX  
PS Claim 10; Page 40; 57pp; English.  
XX  
CC New oligomers are claimed which (A) have at least one peptide nucleic  
CC acid (PNA) subunit and (B) have a sequence hybridisable to AUG region,  
CC coding region, 5'-untranslated region or 3'-untranslated region of ICAM-1  
CC or ELAM-1, or hybridisable to AUG region, coding region, 5'- untranslated  
CC region, exon/intron junction region or 3'-untranslated region of VCAM-1.  
CC The PNAs can be used to target RNA and single stranded DNA (ssDNA) to  
CC produce antisense-type gene regulation moieties. Hence they may be used  
CC therapeutically for modulating cellular adhesion and thus as  
CC antimetastatic agents, anticancer agents, antirhinoviral agents, anti-  
CC AIDS agents and antiinflammatory agents. They may also be useful as  
CC diagnostics, e.g. as probes for specific mRNAs. PNA oligomers have high  
CC affinity for complementary single stranded DNA. They are also able to  
CC form triple helices in which a first PNA strand binds with RNA or ssDNA  
CC and a second PNA strand binds with the resulting double helix or with the  
CC first PNA strand. The PNAs possess no significant charge and are water  
CC soluble, which facilitates cellular uptake. Further, since they contain  
CC amides of non-biological amino acids, they are biostable and resistant to  
CC enzymatic degradation by proteases. The present sequence targets  
CC endothelial leukocyte adhesion molecule-1 (ELAM-1) 3'-untranslated region  
XX  
SQ Sequence 21 BP; 8 A; 3 C; 6 G; 4 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 88.2%; Pred. No. 4.5e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 2489 TGATGGGGTAATCTATA 2505  
Db 5 TGAGGGGGTAATCTACA 21  
|||||

RESULT 4788  
AAT36683  
ID AAT36683 standard; DNA; 21 BP.  
XX  
AC AAT36683;  
XX  
DT 21-JAN-1997 (first entry)  
XX  
DE Antisense oligonucleotide ISIS 2693.  
XX  
KW Antisense oligonucleotide; human; intracellular adhesion molecule-1;  
KW ICAM-1; endothelial leukocyte adhesion molecule-1; ELAM-1; E-selectin;  
KW vascular cell adhesion molecule-1; VCAM-1; white blood cell; brequinar;  
KW vascular endothelium; allograft rejection; immunosuppression; rapamycin;  
KW anti-lymphocyte serum; monoclonal antibody; cardiac allograft; therapy;  
KW renal allograft rejection; donor-specific transplant tolerance; LFA-1;  
KW ss.  
XX  
XX Synthetic.  
OS  
XX  
FH Key Location/Qualifiers  
FT modified\_base 1..21  
FT /\*tag= a  
FT /note= "phosphorothioate backbone"  
XX  
PN WO9615780-A1.  
XX  
PD 30-MAY-1996.  
XX  
PF 22-NOV-1995; 95WO-US015536.  
XX  
PR 23-NOV-1994; 94US-00344155.  
XX  
PA (ISIS-) ISIS PHARM INC.  
PA (TEXA ) UNIV TEXAS SYSTEM.  
XX  
PI Bennett CF, Stepkowski SM;  
XX  
DR WPI; 1996-268321/27.  
XX  
PT Oligo:nucleotide targetted to a nucleic acid sequence encoding ICAM-1,  
PT ELAM-1 or VCAM-1 - useful for treating or preventing allo:graft  
PT rejection.  
XX  
PS Example 8; Page 56; 92pp; English.  
XX  
CC AAT30211-T30233, AAT33058-T33112 and AAT36667-T36684 represent antisense  
CC oligonucleotides of the invention. These sequences target regions of the  
CC coding sequences for human intercellular adhesion molecule-1 (ICAM-1),  
CC endothelial leukocyte adhesion molecule-1 (ELAM-1, also known as E-  
CC selectin), or vascular cell adhesion molecule-1 (VCAM-1). This sequence  
CC targets the 3' untranslated region (nucleotides 2760-2788) of ELAM-1.  
CC ICAM-1, ELAM-1, and VCAM-1 represent three of the five cell adhesion  
CC molecules involved in the adherence of white blood cells to vascular  
CC endothelium. These sequences can be used in a composition for treating  
CC allograft rejection. The composition contains one of these sequences in  
CC combination with an immunosuppressive agent. The immunosuppressive agent  
CC used in the compositions is brequinar, rapamycin, anti-lymphocyte serum,  
CC a monoclonal antibody against LFA-1 or an antisense oligonucleotide. The  
CC compositions can be used for treating or preventing allograft rejection,  
CC such as cardiac or renal allograft rejection. By using these  
CC compositions, allograft survival times are extended, and donor-specific  
CC transplant tolerance is induced  
XX  
SQ Sequence 21 BP; 8 A; 3 C; 6 G; 4 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 88.2%; Pred. No. 4.5e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 2489 TGATGGGGTAATCTATA 2505  
|||||



XX PI Rose TM, Bosch ML, Strand K;  
XX WPI; 1997-212901/19.  
XX  
XX DNA encoding glyco:protein B of Retro:peritoneal fibromatosis and  
PT Kaposi's sarcoma associated Herpes viruses - useful in vaccines for  
PT treatment of herpes infection or for detection of viral DNA.  
XX  
XX Claim 37; Page 36; 138pp; English.  
XX  
XX Claimed type 3 oligonucleotides (AAT84675-82) are specific non-degenerate  
CC oligonucleotides for the human Kaposi's sarcoma- associated herpes virus  
CC (KSHV) glycoprotein B (gB), and can be used for the amplification or  
CC detection of gB-encoding polynucleotides of KSHV origin. GLTEA can be  
CC used with TPTDV as primers in a first amplification of a nested  
CC amplification reaction  
XX  
XX Sequence 21 BP; 4 A; 4 C; 5 G; 8 T; 0 U; 0 Other;  
SQ  
Query Match 0.5%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 88.2%; Pred. No. 4.5e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 2709 TCTCTGCCTGTAAATGT 2725  
Db 4 TCTCTGTCTAGTAAATGT 20  
RESULT 4792  
AAT84689  
ID AAT84689 standard; DNA; 21 BP.  
XX  
XX AAT84689;  
AC  
XX 02-JAN-1998 (first entry)  
DT  
XX  
XX KSHV glycoprotein B sense oligonucleotide VTECA.  
DE  
XX  
KW KSHV; gamma herpes virus; glycoprotein B; vaccine; infection;  
KW human Kaposi's sarcoma-associated herpes virus; probe; primer; ss.  
XX  
XX Synthetic.  
OS  
XX  
XX WO9712042-A2.  
PN  
XX  
XX 03-APR-1997.  
PD  
XX  
XX 26-SEP-1996; 96WO-US015702.  
PF  
XX  
XX 26-SEP-1995; 95US-0004297P.  
PR  
XX  
XX (UNIW ) UNIV WASHINGTON.  
PA  
XX  
XX Rose TM, Bosch ML, Strand K;  
PI  
XX  
XX WPI; 1997-212901/19.  
DR  
XX  
XX DNA encoding glyco:protein B of Retro:peritoneal fibromatosis and  
PT Kaposi's sarcoma associated Herpes viruses - useful in vaccines for  
PT treatment of herpes infection or for detection of viral DNA.  
XX  
XX Claim 37; Page 76; 138pp; English.  
XX  
XX Claimed type 3 oligonucleotides (AAT84686-93) are specific non-degenerate  
CC oligonucleotides for the human Kaposi's sarcoma- associated herpes virus  
CC (KSHV) glycoprotein B (gB). The type 3 oligonucleotides (see also  
CC AAT84675-82) can be used in various pair combinations or with type 1  
CC oligonucleotides (see AAT84650-66) in the PCR amplification, cloning and  
CC sequencing of KSHV polynucleotides encoding gB (see AAT84642 and  
CC AAT84648)  
XX  
XX Sequence 21 BP; 3 A; 7 C; 6 G; 5 T; 0 U; 0 Other;  
SQ

Query Match 0.5%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 88.2%; Pred. No. 4.5e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 756 CCATTTCATGACCAAG 772  
Db 3 CCATTTCCTGACCGAG 19  
RESULT 4793  
AAT76136  
ID AAT76136 standard; DNA; 21 BP.  
XX  
XX AAT76136;  
AC  
XX  
XX 12-SEP-1997 (first entry)  
DT  
XX  
XX Human eosinophil peroxidase antisense oligonucleotide HSEPAS4.  
DE  
XX  
KW Asthma; airway epithelium; adenosine free; cystic fibrosis;  
KW chronic obstructive pulmonary disease; bronchitis; ss.  
XX  
XX Synthetic.  
OS  
XX  
XX WO9640162-A1.  
PN  
XX  
XX 19-DEC-1996.  
PD  
XX  
XX 06-JUN-1996; 96WO-US009306.  
PF  
XX  
XX 07-JUN-1995; 95US-00474497.  
PR  
XX  
XX (UYEC-) UNIV EAST CAROLINA.  
PA  
XX  
XX Nyce JW, Metzger WJ;  
PI  
XX  
XX WPI; 1997-051871/05.  
DR  
XX  
XX Treatment of airway diseases such as asthma - by topically applying  
PT adenosine-free antisense oligo:nucleotide to airway epithelium of  
PT subject.  
PT  
XX  
XX Claim 5; Page 27; 71pp; English.  
PS  
XX  
XX A method for treating airway disease in a subject has been produced,  
CC which involves the topical administration of an essentially adenosine  
CC free antisense oligonucleotide (ON) to the airway epithelium of the  
CC subject. The present sequence is an antisense oligonucleotide HSEPAS4  
CC specific for the human eosinophil peroxidase. The method can be used to  
CC treat airway diseases such as cystic fibrosis, asthma, chronic  
CC obstructive pulmonary disease, bronchitis and other airway diseases  
CC characterised by an inflammatory response. By eliminating adenosine from  
CC the antisense ON, its liberation upon antisense degradation is prevented,  
CC thereby preventing adenosine- induced bronchoconstriction in patients  
CC with hyper-reactive airways  
XX  
XX Sequence 21 BP; 0 A; 4 C; 7 G; 10 T; 0 U; 0 Other;  
SQ  
Query Match 0.5%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 88.2%; Pred. No. 4.5e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 2566 CTCTGTTCTTGGCTTGG 2582  
Db 1 CTCTGTTCTTGGTTTGG 17  
RESULT 4794  
AAV05263  
ID AAV05263 standard; DNA; 21 BP.  
XX  
XX AAV05263;  
AC



XX 18-MAY-1998 (first entry)  
DT Antisense primer used to amplify part of exon 2 of the BRCA1 gene.  
XX  
DE  
XX  
XX BRCA1 gene; identification; mutation; multiplex amplification process;  
KW ovarian cancer; breast cancer; large scale diagnostic screening;  
KW PCR primer; amplify; ds.  
XX  
XX Synthetic.  
OS Homo sapiens.  
XX  
XX WO9743441-A1.  
PN  
XX  
PD 20-NOV-1997.  
XX  
XX  
PF 13-MAY-1997; 97WO-CA000321.  
XX  
XX 14-MAY-1996; 96US-00649950.  
PR  
XX (VISI-) VISIBLE GENETICS INC.  
PA  
XX Shipman R, Leushner J, Dunn JM;  
PI  
XX WPI; 1998-008902/01.  
DR  
XX  
XX  
PT Detecting mutation(s) in the BRCA1 gene by exon amplification - then  
PT comparing amplification products with those from wild type gene,  
PT optionally followed by sequencing.  
XX  
XX Claim 15; Page 10; 65pp; English.  
PS  
XX PCR primers AAV05262-64 are used to amplify a region of exon 2 of the  
CC BRCA1 gene. The primers are used in a method for identifying mutations in  
CC the BRCA1 gene using a multiplex amplification process. Mutations in  
CC BRCA1 are associated with ovarian and breast cancer. A sample is tested  
CC for mutations in the BRCA1 gene by amplifying at least one (partial) exon  
CC of the gene, and comparing the sizes and amounts of amplification  
CC products with corresponding products of the wild-type gene. Any  
CC differences indicate a mutation. If no mutations are detected, the  
CC sequence of at least one exon may be determined. This method is  
CC inexpensive enough to be used for large scale diagnostic screening  
XX  
SQ Sequence 21 BP; 4 A; 3 C; 5 G; 9 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 88.2%; Pred. No. 4.5e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 1095 CTGTTTCATTGGCTAGG 1111  
Db 3 CTGTTTCATTGCATAGG 19  
  
RESULT 4795  
AAX79217  
ID AAX79217 standard; DNA; 21 BP.  
XX  
XX  
AC AAX79217;  
XX  
DT 31-AUG-1999 (first entry)  
XX  
DE Oligonucleotide #10 forms an intramolecular stacked tetrad structure.  
XX  
KW Column; box; stacked tetrad; inhibition; replication; pathophysiological;  
KW herpes simplex virus; HSV; human papilloma virus; Epstein Barr Virus;  
KW HPV; EBV; HIV; human immunodeficiency virus; adenovirus; RSV; HBV; HCMV;  
KW respiratory syncytial virus; hepatitis B virus; human cytomegalovirus;  
KW human T-cell leukaemia virus; HTLV; ss.  
XX  
XX Synthetic.  
OS  
XX  
XX Key Location/Qualifiers  
FH

FT modified\_base 1. .21  
FT /\*tag= a  
FT /note= "optionally contains phosphodiester  
FT internucleotide linkages"  
FT misc\_structure 1. .21  
FT /\*tag= b  
FT /note= "forms intramolecular stacked tetrad or 3D  
FT columnar box structure"  
XX  
XX WO9833807-A1.  
PN  
XX  
XX 06-AUG-1998.  
PD  
XX 03-FEB-1998; 98WO-US001974.  
PF  
XX 04-FEB-1997; 97US-0037374P.  
PR  
XX 09-DEC-1997; 97US-00987574.  
PR  
XX (ARON-) ARONEX PHARM INC.  
PA  
XX Rando RF, Ojwang JO, Hogan ME, Wallace TL, Cossum PA;  
XX  
XX WPI; 1998-446809/38.  
PI  
XX New guanosine-rich tetrad forming oligonucleotide(s) - used for  
DR inhibiting virus replication for treating e.g. herpes simplex, papilloma,  
XX HIV, adenovirus or hepatitis B virus infection.  
XX  
PS Disclosure; Page 137; 140pp; English.  
XX  
XX Sequences AAX79210-X79275 represent oligonucleotides (ON) which are able  
CC to form a columnar box or "stacked tetrad" structure by intramolecular  
CC internucleotide binding. The ONs are used to inhibit the replication of  
CC viruses. They are able to suppress virus production for prolonged periods  
CC after an initial short treatment regimen. They can be used for treating  
CC pathophysiological states caused by viruses such as herpes simplex virus,  
CC human papilloma virus, Epstein Barr Virus, HIV, adenovirus, respiratory  
CC syncytial virus, hepatitis B virus, human cytomegalovirus and HTLV I and  
CC II  
XX  
SQ Sequence 21 BP; 0 A; 0 C; 17 G; 4 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 88.2%; Pred. No. 4.5e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 106 GCTTGGGGGCTGGGGG 122  
Db 4 GCTTGGGGGCTGGGGG 20  
  
RESULT 4796  
AAV40572/C  
ID AAV40572 standard; DNA; 21 BP.  
XX  
XX AAV40572;  
AC  
XX 21-DEC-1998 (first entry)  
DT  
XX  
DE Human TSC gene exon 3 reverse primer hTSCex3.  
XX  
KW Thiazide-sensitive Na-Cl cotransporter; TSC; hTSC gene; human;  
KW ion transport; Gitelman's syndrome; Bartter's syndrome;  
KW hypokalaemic alkalosis; hypocalciuria; hypomagnesemia; diagnosis;  
KW therapy; SSCP; primer; ss.  
XX  
XX Synthetic.  
OS Homo sapiens.  
XX  
XX WO9829431-A1.  
PN  
XX 09-JUL-1998.  
PD  
XX

PF 19-DEC-1997; 97WO-US023553.  
XX  
PR 31-DEC-1996; 96US-00778052.  
XX  
PA (UYVA ) UNIV YALE.  
XX  
XX Lifton RP, Simon DB;  
PI  
XX  
DR WPI; 1998-388029/33.  
XX  
XX  
PT Thiazide sensitive cotransporter and ATP sensitive potassium channel  
PT genes - useful for developing products for the diagnosis and treatment of  
PT ion transport disorders, e.g. Gitelman's Syndrome or Bartter's Syndrome.  
XX  
XX Example 1; Page 51; 105pp; English.  
PS  
XX Primers hTSCex3 forward and reverse (see AAV40571 and AAV40572,  
CC respectively) are designed to amplify exon 3 of the human hTSC gene (see  
CC AAV40561) that codes for thiazide-sensitive Na-Cl cotransporter TSC (see  
CC AAW29682). Both primers are located within introns of hTSC. 27 Sets of  
CC specific primers (see AAV40565-V40618) were used for SSCP analysis of  
CC hTSC. Amplified products were analysed for molecular variants by  
CC electrophoresis, and identified variants were sequenced. Complete linkage  
CC of Gitelman's syndrome with TSC was demonstrated. Identification of the  
CC molecular basis of Gitelman's syndrome allows for the genetic diagnosis  
CC of this disorder. The invention provides products and methods useful for  
CC diagnosis and treatment of Gitelman's syndrome and other ion transport  
CC disorders  
XX  
SQ Sequence 21 BP; 6 A; 2 C; 9 G; 4 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 88.2%; Pred. No. 4.5e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1781 TGAACCCCATCTTTCC 1797  
Db 20 TGAATCCCATCTTTCC 4  
RESULT 4797  
AAZ26192  
ID AAZ26192 standard; DNA; 21 BP.  
XX  
AC AAZ26192;  
XX  
DT 30-NOV-1999 (first entry)  
XX  
DE Human polymorphic region 381.  
XX  
KW Polymorphism; human; inhibitor; cancer; treatment; cell growth; LOH;  
KW cell viability; loss of heterozygosity; precancerous condition; ASI;  
KW allele specific inhibitor; somatic cell; diagnosis; prevention;  
KW atherosclerotic plaque; premalignant metaplastic lesion; endometriosis;  
KW dysplastic lesion; benign tumour; polycystic kidney disease; transplant;  
KW graft versus host disease; malignant cell removal; bone marrow; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO9841648-A2.  
XX  
PD 24-SEP-1998.  
XX  
XX  
PF 19-MAR-1998; 98WO-US005419.  
XX  
PR 20-MAR-1997; 97US-0041057P.  
XX  
PA (VARI-) VARIAGENICS INC.  
XX  
XX Housman D, Ledley FD, Stanton VP;  
PI  
XX WPI; 1998-521232/44.  
DR  
XX

PT Identifying target genes for allele-specific drugs - used for diagnosis,  
PT prevention and treatment of, e.g. cancers, atherosclerotic plaque,  
PT dysplastic lesions, endometriosis or graft versus host disease.  
XX  
PS Disclosure; Fig 7; 605pp; English.  
XX  
XX This invention describes a novel method for identifying an inhibitor  
CC potentially useful for treatment of cancer, where the inhibitor is active  
CC on a gene vital for cell growth or viability, and where the gene is  
CC subject to loss of heterozygosity (LOH) in a cancer. The inhibitor is  
CC used for preventing the development of cancer in a patient having a  
CC precancerous condition, by administering to the patient a first allele  
CC specific inhibitor (ASI) targeted to an allele of a first essential gene  
CC present in cells of the precancerous condition, where the normal somatic  
CC cells of the patient are heterozygous for the first gene, the inhibitor  
CC is active on at least one but less than all allelic forms of the gene  
CC present in a population and targets only one allelic form present in the  
CC normal somatic cells, and the first gene. The products and methods can be  
CC used in the diagnosis, prevention and treatment of LOH disorders, e.g.  
CC cancers, atherosclerotic plaques, premalignant metaplastic or dysplastic  
CC lesions, benign tumours, endometriosis, polycystic kidney disease, and  
CC graft versus host disease. The method can also be used to remove  
CC malignant cells from bone marrow transplants. AAZ25812-Z26825 represent  
CC human polymorphic sites described in the method of the invention  
XX  
SQ Sequence 21 BP; 2 A; 7 C; 7 G; 5 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 88.2%; Pred. No. 4.5e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 712 CCAGCACCTGTGTGCTGC 728  
Db 5 CCAGCAGCTGGTGCTGC 21  
RESULT 4798  
AAZ99727  
ID AAZ99727 standard; DNA; 21 BP.  
XX  
AC AAZ99727;  
XX  
DT 29-SEP-1999 (first entry)  
XX  
DE Human AUR2 inhibitor.  
XX  
KW AUR1; AUR2; human; AUR modulator; cancer; glioma; medullablastoma;  
KW chondrosarcoma; pancreatic tumour; proliferative disease; diagnosis;  
KW therapy; inhibitor; ss.  
XX  
OS Synthetic.  
OS Homo sapiens.  
XX  
PN WO9937788-A2.  
XX  
PD 29-JUL-1999.  
XX  
XX  
PF 21-JAN-1999; 99WO-US001283.  
XX  
PR 22-JAN-1998; 98US-00012135.  
XX  
PA (SUGE-) SUGEN INC.  
XX  
XX Plowman GD, Mossie K;  
PI  
XX WPI; 1999-458699/38.  
DR  
XX  
XX New nucleic acid encoding human AUR1 and 2 polypeptides, used to identify  
PT specific modulators for treating cancer or for diagnosis.  
XX  
PS Claim 24; Page 120; 153pp; English.  
XX  
XX This sequence is an inhibitor of the human AUR2 protein of the invention.  
CC

CC The AUR1 and AUR2 proteins can be used to identify specific modulators  
CC of, and to generate specific antibodies recognising AUR1 and AUR2. The  
CC modulators can be used for treating conditions involving abnormal AUR  
CC signal transduction, specifically cancer (of colon, breast, kidney,  
CC ovary, bladder, head or neck, also glioma, medullablastoma,  
CC chondrosarcoma and pancreatic tumours, particularly of colon  
CC (specifically), breast or kidney). The modulators can also be used for  
CC studying their effects in animal models of proliferative disease. Probes,  
CC based on the coding sequences are used, diagnostically, to detect or  
CC quantify AUR mRNA, by hybridisation or polymerase chain reaction (PCR).  
CC The DNA, optionally mutated, are useful in gene therapy. Ab are used as  
CC diagnostic immunoassay reagents for detecting the proteins  
XX  
SQ Sequence 21 BP; 3 A; 12 C; 4 G; 2 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 88.2%; Pred. No. 4.5e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 595 CCGCGCTCCGACCTGC 611  
Db 4 CCGCCACTCCGACCAGC 20  
  
RESULT 4799  
AAV63682  
ID AAV63682 standard; DNA; 21 BP.  
XX  
AC AAV63682;  
XX  
XX 11-MAR-1999 (first entry)  
XX  
DE HIV-2 ENV region PCR primer.  
XX  
XX  
KW HIV-1; HIV-2; detection; Acquired Immunodeficiency Syndrome; AIDS;  
KW co-amplification assay; PCR primer; ss.  
XX  
OS Synthetic.  
OS Human immunodeficiency virus 2.  
XX  
XX EP887427-A2.  
XX  
XX 30-DEC-1998.  
XX  
XX 24-JUN-1998; 98EP-00304959.  
XX  
XX 25-JUN-1997; 97US-0050759P.  
XX  
XX (ORTH-) ORTHO-CLINICAL DIAGNOSTICS INC.  
XX  
XX Backus JW, Atwood SM, Casey AE, Rasmussen EB, Cummins TJ;  
PI WPI; 1999-047891/05.  
XX  
DR Detecting Human Immunodeficiency Virus 1 and 2 - using at least four new  
XX oligonucleotide primers and multiple detection probes.  
PT  
XX  
XX Claim 12; Page 4; 25pp; English.  
PS  
XX  
XX PCR primers AAV63681-88 are used to amplify human deficiency type 2 (HIV-  
CC 2) nucleic acids. The specification also describes primers and probes for  
CC HIV-1 and HIV-2. The primers and probes are useful for amplifying and  
CC detecting HIV-1 and HIV-2 and all their subtype nucleic acids in  
CC biological samples, and for giving progress in our understanding of  
CC Acquired Immunodeficiency Syndrome (AIDS). The primers are able to detect  
CC all HIV-1 and HIV-2 subtypes without detecting non-related viruses. The  
CC primer sets for HIV-1 and HIV-2 are compatible with each other, and can  
CC be combined to form a co-amplification assay for HIV-1 and HIV-2. Using  
CC more than one primer set to amplify target nucleic acid sequences which  
CC overlap a common probe region maximises strain sensitivity and robustness  
XX  
SQ Sequence 21 BP; 6 A; 3 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 88.2%; Pred. No. 4.5e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 734 CAGACAGTCATTCGCAA 750  
Db 3 CAGACGGTCAGTCGCAA 19  
  
RESULT 4800  
AAX53935  
ID AAX53935 standard; DNA; 21 BP.  
XX  
AC AAX53935;  
XX  
XX 05-JUL-1999 (first entry)  
XX  
DE Eosinophil peroxidase antisense oligonucleotide fragment.  
XX  
KW Antisense oligonucleotide; multiple target; antisense treatment;  
KW impaired respiration; inflammation; lung disease;  
KW pulmonary vasoconstriction; inflammation; allergic rhinitis;  
KW acute asthma; allergy; asthma; impeded respiration;  
KW respiratory distress syndrome; pain; cystic fibrosis;  
KW pulmonary hypertension; pulmonary vasoconstriction; emphysema;  
KW chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma;  
KW colon cancer; breast cancer; lung cancer; pancreatic cancer;  
KW hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;  
KW prostate cancer; ss.  
XX  
XX Synthetic.  
OS  
XX WO9913886-A1.  
XX  
XX 25-MAR-1999.  
XX  
XX 17-SEP-1998; 98WO-US019419.  
XX  
XX 17-SEP-1997; 97US-0059160P.  
XX  
XX 09-JUN-1998; 98US-00093972.  
XX  
XX (UYEC-) UNIV EAST CAROLINA.  
XX  
XX Nyce JW;  
XX  
XX WPI; 1999-229400/19.  
XX  
XX New antisense oligonucleotides used in treatment of, e.g. pulmonary  
PT vasoconstriction.  
XX  
XX Disclosure; Page 46; 120pp; English.  
PS  
XX  
XX The specification describes antisense oligonucleotides (AAX52869-X55271)  
CC directed against at least 2 mRNAs selected from target genes, coding and  
CC non-coding regions of RNAs corresponding to target genes, gene initiation  
CC codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'-  
CC -end and the juxta-section between coding and non-coding regions and all  
CC segments of RNAs encoding proteins associated with one or more diseases,  
CC conditions or mixtures. The antisense oligonucleotides may be derived  
CC from sequences AAX55272-74. These multiple target oligonucleotides  
CC (specifically AAX55180-271) can be used for the antisense treatment of  
CC diseases and conditions. Typical diseases and conditions are those  
CC associated with impaired respiration and inflammation, including lung  
CC diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis,  
CC acute asthma, allergies, asthma, impeded respiration, respiratory  
CC distress syndrome, pain, cystic fibrosis, pulmonary hypertension,  
CC pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary  
CC disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g.  
CC colon cancer, breast cancer, lung cancer, pancreatic cancer,  
CC hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, as  
CC well as all types of cancers which may metastasize or have metastasized  
CC to the lungs, including breast and prostate cancer  
XX

SQ	Sequence 21 BP; 0 A; 4 C; 7 G; 10 T; 0 U; 0 Other;	
	Query Match 0.5%; Score 13.8; DB 1; Length 21;	
	Best Local Similarity 88.2%; Pred. No. 4.5e+03;	
	Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;	
QY	2566 CTCGTGTTCTGGCTTGG 2582	
Db	1 CTCGTGTTCTGGTTTGG 17	
RESULT 4801		
AAZ21762		
ID	AAZ21762 standard; DNA; 21 BP.	
XX		
AC	AAZ21762;	
XX		
DT	01-DEC-1999 (first entry)	
XX		
DE	Exemplary oligonucleotide primer D14S140 (Rev).	
XX		
KW	neoplasia; mutant; target nucleotide; hybridization; lung cancer; ss;	
KW	neck cancer; head cancer; saliva test; chemotherapy; early detection;	
KW	primer; PCR; amplification.	
XX		
OS	Synthetic.	
OS	Homo sapiens.	
XX		
PN	WO9946408-A1.	
XX		
PD	16-SEP-1999.	
XX		
PF	10-MAR-1999; 99WO-US005220.	
XX		
PR	10-MAR-1998; 98US-00038637.	
XX		
PA	(UYJO ) UNIV JOHNS HOPKINS SCHOOL MEDICINE.	
XX		
PI	Sidransky D;	
XX		
DR	WPI; 1999-551428/46.	
XX		
PT	Detection of cancers comprises assaying for a genetic mutation associated	
PT	with cancer.	
XX		
PS	Disclosure; Page 26; 99pp; English.	
XX		
CC	This is an exemplary oligonucleotide primer, for use in the detection of	
CC	neoplastic related gene mutations. There are over 40 known proto-	
CC	oncogenes and suppressor genes to date, which control growth,	
CC	development, and cell differentiation. Regulation of these genes can,	
CC	under certain circumstances, be altered and normal cells can assume	
CC	neoplastic growth characteristics. The invention provides a method for	
CC	detecting a neoplastic disorder of the head and neck or lung in a	
CC	subject. The detection of a target mutant nucleotide sequence in the	
CC	saliva is indicative of a neoplastic disorder of the head, neck or lung.	
CC	This allows early detection and therefore treatment of the preneoplasia	
CC	or cancer, and can also be used to monitor high risk patients undergoing	
CC	chemoprevention or chemotherapy	
XX		
SQ	Sequence 21 BP; 4 A; 5 C; 3 G; 9 T; 0 U; 0 Other;	
	Query Match 0.5%; Score 13.8; DB 1; Length 21;	
	Best Local Similarity 88.2%; Pred. No. 4.5e+03;	
	Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;	
QY	89 CCGATTTTGGATTACC 105	
Db	5 CAGATTTTGGATTACC 21	
RESULT 4802		
AAA33375		

ID	AAA33375 standard; DNA; 21 BP.	
XX		
AC	AAA33375;	
XX		
DT	28-JUL-2000 (first entry)	
XX		
DE	Low adenosine antisense oligonucleotide SEQ ID NO:1064.	
XX		
KW	Human; adenosine receptor; low adenosine antisense oligonucleotide;	
KW	phosphorothioate; impaired respiration; inflammation; allergy;	
KW	allergic disease; bronchoconstriction; inhibitor; antiinflammatory;	
KW	antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway;	
KW	lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;	
KW	respiratory distress syndrome; pain; cystic fibrosis; emphysema;	
KW	pulmonary hypertension; chronic obstructive pulmonary disease; COPD;	
KW	cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.	
XX		
OS	Homo sapiens.	
XX		
PN	WO200009525-A2.	
XX		
PD	24-FEB-2000.	
XX		
PF	03-AUG-1999; 99WO-US017712.	
XX		
PR	03-AUG-1998; 98US-0095212P.	
XX		
PA	(UYEC-) UNIV EAST CAROLINA.	
XX		
PI	Nyce JW;	
XX		
DR	WPI; 2000-205971/18.	
XX		
PT	New antisense oligonucleotides useful for treating e.g. pulmonary	
PT	vasoconstriction, inflammation, allergies, asthma, hypertension,	
PT	bronchitis, emphysema, respiratory distress syndrome, ischemia or	
PT	cancers.	
XX		
PS	Claim 18; Page 398; 1343pp; English.	
XX		
CC	The present invention describes a new composition comprising an antisense	
CC	oligonucleotide (ON) with low adenosine (up to 15%), which targets	
CC	nucleic acids involved in bronchoconstriction, allergies, and/or	
CC	inflammation. The ON can have antiinflammatory, antiallergic,	
CC	antiasthmatic, cytostatic and analgesic activities. The compositions are	
CC	useful for the treatment of diseases associated with inflammation,	
CC	impaired airways, including lung disease and diseases whose secondary	
CC	effects afflict the lungs of a subject. They can be used for treating	
CC	e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma,	
CC	impaired respiration, respiratory distress syndrome, pain, cystic	
CC	fibrosis, pulmonary hypertension, emphysema, chronic obstructive	
CC	pulmonary disease (COPD), and cancers such as leukaemias, lymphomas,	
CC	carcinomas, and cancers which may metastasize to the lungs, including	
CC	breast and prostate cancer. The reduction of the adenosine content of the	
CC	ONs reduces side effects. The A-containing ONs break down with the	
CC	release of deoxyadenosine which activates adenosine receptors causing	
CC	bronchoconstriction and inflammation. AAA32313 to AAA3512 represent the	
CC	nucleotide sequences given in the sequence listing from the present	
CC	invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185	
CC	sequences are also called SEQ ID NO:1 to 185, but the sequences differ	
CC	from the previously named sequences. SEQ ID NO:11 to 1680 (AAA32323 to	
CC	AAA33992) are specifically claimed ONs from the present invention. N.B.	
CC	Sequences given in the disclosure of the present invention do not match	
CC	up with their corresponding SEQ ID NO: sequences given in the sequence	
CC	listing	
XX		
SQ	Sequence 21 BP; 0 A; 4 C; 7 G; 10 T; 0 U; 0 Other;	
	Query Match 0.5%; Score 13.8; DB 1; Length 21;	
	Best Local Similarity 88.2%; Pred. No. 4.5e+03;	
	Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;	
QY	2566 CTCGTGTTCTGGCTTGG 2582	



```
Db      |||||
1 CTCTGTTCTGTTTGG 17

RESULT 4803
AAZ55720/c
ID   AAZ55720 standard; DNA; 21 BP.
XX
AC   AAZ55720;
XX
DT   27-MAR-2000 (first entry)
XX
DE   Human caspase-9 PCR primer SEQ ID NO:2.
XX
KW   Caspase-9; human; apoptosis; transgenic animal; caspase-9 knockout; PCR;
KW   primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO9963097-A2.
XX
PD   09-DEC-1999.
XX
PF   28-MAY-1999; 99WO-US011861.
XX
PR   02-JUN-1998; 98US-0087711P.
XX
PA   (VERT-) VERTEX PHARM INC.
PA   (UYYA ) UNIV YALE.
XX
XX   Kuida K, Flavell RA;
PI
XX   WPI; 2000-086981/07.
XX
PT   Transgenic animal used to identify agents which treat or prevent
PT   disorders associated with viral infections.
XX
PS   Example 1; Page 8; 33pp; English.
XX
CC   The invention relates to a genetically altered animal that is defective
CC   for expression of caspase-9. Caspase-9 is a cysteine protease that
CC   activates other members of the caspase cascade, and is therefore involved
CC   in regulating apoptosis, particularly of neurons, smooth or cardiac
CC   muscle cells, or where associated with viral infection. Inhibition of
CC   expression or activity of caspase-9 will thus reduce apoptosis. Agents
CC   that inhibit expression or activity of caspase-9 have anti-apoptotic
CC   activity, and may be used for the treatment or prevention of
CC   developmental abnormalities; nerve cell death; smooth or cardiac muscle
CC   degeneration, or cell death associated with viral infection. Sequences
CC   AAZ55719-Z55720 represent PCR primers used to isolate and amplify human
CC   caspase-9 cDNA from Jurkat cells. The cDNA thus isolated was used to
CC   obtain a mouse caspase-9 genomic clone, which included the sequence
CC   encoding the caspase family active pentapeptide motif (AA58372). The
CC   murine caspase-9 genomic DNA was subsequently used in the generation of
CC   caspase-9 deficient mice
XX
SQ   Sequence 21 BP; 9 A; 0 C; 4 G; 8 T; 0 U; 0 Other;

Query Match      0.5%; Score 13.8; DB 1; Length 21;
Best Local Similarity 88.2%; Pred. No. 4.5e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY   2500 TCTATAACATCATATAA 2516
Db      |||||
17 TCTTTAAACATCATATAA 1

RESULT 4804
AAZ73879/c
ID   AAZ73879 standard; DNA; 21 BP.
XX
AC   AAZ73879;
XX
```

```
DT      10-SEP-2001 (first entry)
XX
DE   Human biallelic marker downstream amplification primer SEQ ID NO:8235.
XX
KW   Human genome; biallelic marker; high density disequilibrium map;
KW   genomic map; haplotype; phenotype; polymorphic base; genotyping;
KW   haplotyping; hybridisation; identification; characterisation;
KW   amplification; single nucleotide polymorphism; SNP; PCR primer;
KW   diagnosis; ss.
XX
OS   Homo sapiens.
XX
PN   WO9954500-A2.
XX
PD   28-OCT-1999.
XX
PF   21-APR-1999; 99WO-IB000822.
XX
PR   21-APR-1998; 98US-0082614P.
PR   23-NOV-1998; 98US-0109732P.
XX
PA   (GEST ) GENSET.
XX
XX   Cohen D, Blumenfeld M, Chumakov I;
PI
XX   WPI; 2000-013267/01.
XX
PT   Novel biallelic markers used to construct a high density disequilibrium
PT   map of the human genome.
XX
PS   Claim 8; Page 1986; 2745pp; English.
XX
CC   AAZ65654 to AAZ69578 represent human biallelic markers from the present
CC   invention, which contain a polymorphic base at position 24 of their
CC   nucleotide sequences. AAZ69579 to AAZ77440 represent amplification
CC   primers for the biallelic markers. The biallelic markers of the invention
CC   have a variety of uses: they can be used for high density mapping of the
CC   human genome, and in complex association studies and haplotyping studies
CC   which are useful in determining the genetic basis for disease states.
CC   Compositions and methods of the invention can also be useful for the
CC   identification of the targets for the development of pharmaceutical
CC   agents and diagnostic methods, as well as the characterisation of the
CC   differential efficacious responses to and side effects from
CC   pharmaceutical agents acting on a disease as well as other treatment.
CC   N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and
CC   3367, are not actually given a sequence in the Sequence Listing from the
CC   present invention
XX
SQ   Sequence 21 BP; 9 A; 4 C; 3 G; 5 T; 0 U; 0 Other;

Query Match      0.5%; Score 13.8; DB 1; Length 21;
Best Local Similarity 88.2%; Pred. No. 4.5e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY   2062 TTAATAAGTCGTATCTG 2078
Db      |||||
19 TTCATAAGTAGTATCTG 3

RESULT 4805
AAZ75815
ID   AAZ75815 standard; DNA; 21 BP.
XX
AC   AAZ75815;
XX
DT   10-SEP-2001 (first entry)
XX
DE   Human biallelic marker downstream amplification primer SEQ ID NO:10171.
XX
KW   Human genome; biallelic marker; high density disequilibrium map;
KW   genomic map; haplotype; phenotype; polymorphic base; genotyping;
KW   haplotyping; hybridisation; identification; characterisation;
KW   amplification; single nucleotide polymorphism; SNP; PCR primer;
```

KW diagnosis; ss.  
XX Homo sapiens.  
OS  
XX PN WO9954500-A2.  
XX PD 28-OCT-1999.  
XX PF 21-APR-1999; 99WO-IB000822.  
XX PR 21-APR-1998; 98US-0082614P.  
XX PR 23-NOV-1998; 98US-0109732P.  
XX PA (GEST ) GENSET.  
XX PI Cohen D, Blumenfeld M, Chumakov I;  
XX PI WPI; 2000-013267/01.  
DR Novel biallelic markers used to construct a high density disequilibrium  
XX map of the human genome.  
PS Claim 9; Page 2399; 2745pp; English.  
XX AAZ65654 to AAZ69578 represent human biallelic markers from the present  
CC invention, which contain a polymorphic base at position 24 of their  
CC nucleotide sequences. AAZ69579 to AAZ77440 represent amplification  
CC primers for the biallelic markers. The biallelic markers of the invention  
CC have a variety of uses: they can be used for high density mapping of the  
CC human genome, and in complex association studies and haplotyping studies  
CC which are useful in determining the genetic basis for disease states.  
CC Compositions and methods of the invention can also be useful for the  
CC identification of the targets for the development of pharmaceutical  
CC agents and diagnostic methods, as well as the characterisation of the  
CC differential efficacious responses to and side effects from  
CC pharmaceutical agents acting on a disease as well as other treatment.  
CC N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and  
CC 3367, are not actually given a sequence in the Sequence Listing from the  
CC present invention  
XX Sequence 21 BP; 8 A; 7 C; 2 G; 4 T; 0 U; 0 Other;  
SQ Query Match 0.5%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 88.2%; Pred. No. 4.5e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1567 AAAAATCCTTCTCCACC 1583  
Db 1 AAAAACCCTGCTCCACC 17  
RESULT 4806  
AAFI9497  
ID AAFI9497 standard; DNA; 21 BP.  
XX AC AAFI9497;  
XX 14-MAR-2001 (first entry)  
XX Human eosinophil peroxidase polynucleotide fragment #1064.  
DE Low adenosine antisense oligonucleotide; phosphorothioate; allergy;  
XX human; airway disorder; bronchoconstriction; lung inflammation;  
KW surfactant depletion; respiratory; bronchodilator; antiinflammatory;  
KW immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic;  
KW respiratory obstruction; pulmonary obstruction; impeded respiration;  
KW surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;  
KW respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;  
KW pulmonary hypertension; emphysema; pulmonary transplantation rejection;  
KW chronic obstructive pulmonary disease; pulmonary infection; bronchitis;  
KW cancer; ss.  
XX Homo sapiens.  
OS

XX WO200062736-A2.  
PN 26-OCT-2000.  
XX 24-MAR-2000; 2000WO-US008020.  
XX 06-APR-1999; 99US-0127958P.  
XX (UYEC-) UNIV EAST CAROLINA.  
PA (NYCE/) NYCE J W.  
XX Nyce JW;  
XX WPI; 2000-679539/66.  
DR Low adenosine (A) content antisense oligonucleotides which do not trigger  
XX adenosine receptors during metabolism, useful e.g. for treating cancers  
PT and respiratory obstructions.  
PT Claim 14; Page 145; 1592pp; English.  
XX The present invention describes low adenosine (A) content antisense  
CC oligonucleotides and compositions (I) comprising them. In the antisense  
CC oligonucleotides the A is replaced by a 'Universal' or alternative base.  
CC (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,  
CC immunosuppressive, antiasthmatic, hypotensive and cytostatic activities.  
CC The antisense oligonucleotides and (I) can be used to down-regulate the  
CC expression and or activity of target polypeptides associated with  
CC lung/respiratory disorders and malignancies, such as stimulating and  
CC activating peptide factors and transmitters, transcription factors,  
CC immunoglobulins and antibodies, antibody receptors, cytokines and  
CC chemokines, endogenously produced specific and non-specific enzymes,  
CC binding proteins, adhesion molecules and their receptors, cytokine and  
CC chemokine receptors, adenosine receptors, bradykinin receptors, central  
CC nervous system (CNS) and peripheral nervous and non-nervous system  
CC receptors, CNS and peripheral nervous and non-nervous system peptide  
CC transmitters, defensins, growth factors, vasoactive peptides and  
CC receptors, binding proteins and malignancy associated proteins. The  
CC antisense oligonucleotides may be used in this way to treat disorders  
CC including respiratory obstruction (especially pulmonary obstruction  
CC and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or  
CC surfactant hypoproduction which are associated with a disease or  
CC condition selected from pulmonary vasoconstriction, inflammation,  
CC allergies, asthma, impeded respiration, respiratory distress syndrome  
CC (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary  
CC hypertension, emphysema, chronic obstructive pulmonary disease (COPD),  
CC pulmonary transplantation rejection, pulmonary infections, bronchitis,  
CC and/or cancer. AAF18434 to AAF21543 represent human polynucleotide  
CC fragments and antisense oligonucleotides used in the exemplification of  
CC the present invention  
XX Sequence 21 BP; 0 A; 4 C; 7 G; 10 T; 0 U; 0 Other;  
SQ Query Match 0.5%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 88.2%; Pred. No. 4.5e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 2566 CTCTGTTCTTGGCTTGG 2582  
Db 1 CTCTGTTCTTGGTTGG 17  
RESULT 4807  
AAAG2937/c  
ID AAAG2937 standard; DNA; 21 BP.  
XX AAAG2937;  
AC AAAG2937;  
XX 13-NOV-2000 (first entry)  
XX Antisense oligonucleotide A0286U for p300 expression inhibition.  
DE

KW CBP; CREB binding protein; p300; antisense; leukaemia; cytostatic;  
KW CAMP response element binding protein; ss.  
XX Unidentified.  
OS  
XX JP2000139464-A.  
PN  
XX 23-MAY-2000.  
PD  
XX  
XX 13-NOV-1998; 98JP-00341086.  
PF  
XX 13-NOV-1998; 98JP-00341086.  
PR  
XX (TOAG ) TOA GOSEI CHEM IND LTD.  
PA  
XX WPI; 2000-433937/38.  
DR  
XX An antisense nucleic acid compound for inhibition of expression of p300  
XX or CBP.  
PT  
XX Claim 1; Page 4; 10pp; Japanese.  
PS  
XX This invention relates to antisense oligonucleotides used for the  
CC inhibition of the expression of p300 or CBP (CREB binding protein). The  
CC antisense oligonucleotides exhibit cytostatic activity, and specifically  
CC inhibit the expression of the CAMP response element binding protein  
CC (CREB). The oligonucleotides are used in the therapy, diagnosis and  
CC investigation of blood related malignant tumours (e.g. leukaemia). The  
CC present sequence represents an antisense oligonucleotide that inhibits  
CC p300 expression  
XX  
SQ Sequence 21 BP; 5 A; 5 C; 4 G; 7 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 88.2%; Pred. No. 4.5e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 672 ACATGCCTCACCAGATG 688  
DB 17 ACATGACTTACCAGATG 1  
RESULT 4808  
AAZ48932  
ID AAZ48932 standard; DNA; 21 BP.  
XX  
AC AAZ48932;  
XX  
DT 29-MAR-2000 (first entry)  
XX  
DE Human ELAM-1 antisense inhibitor, ISIS #2693.  
XX  
KW Antisense inhibitor; human; ICAM-1; intercellular adhesion molecule-1;  
KW vascular cell adhesion molecule-1; hyperproliferative disorder; VCAM-1;  
KW endothelial leukocyte adhesion molecule-1; ELAM-1; skin condition;  
KW cancer; viral infection; tumour; diapedesis; graft versus host disease;  
KW arthritis; infection; autoimmune disorder; multiple sclerosis; stroke;  
KW juvenile diabetes mellitus; arthritis; myasthenia gravis; therapy;  
KW pemphigus vulgaris; systemic lupus erythematosus; acute myocarditis;  
KW cardiovascular disorder; dilated cardiomyopathy; ischaemic heart disease;  
KW ss.  
XX Homo sapiens.  
OS  
XX WO9961462-A1.  
PN  
XX 02-DEC-1999.  
PD  
XX 26-MAY-1999; 99WO-US011548.  
PF  
XX 27-MAY-1998; 98US-00085759.  
PR  
XX (ISIS-) ISIS PHARM INC.  
PA

XX Bennett CF, Mirabelli CK, Baker BF;  
PI WPI; 2000-072600/06.  
XX  
XX New antisense oligonucleotides, used for treating e.g. inflammatory  
PT conditions, psoriasis, graft rejection, cancers, infections,  
PT cardiovascular disorders or autoimmune disorders.  
PT  
XX Example 15; Page 181; 199pp; English.  
PS  
XX This sequence is an antisense oligonucleotide of the invention. The  
CC antisense oligonucleotides are targeted to a nucleic acid encoding a  
CC cellular adhesion molecule (CAM) and is capable of modulating the  
CC expression of the CAM. They particularly inhibit intercellular adhesion  
CC molecule-1 (ICAM-1), vascular cell adhesion molecule-1 (VCAM-1), or  
CC endothelial leukocyte adhesion molecule-1 (ELAM-1). The antisense  
CC oligonucleotides can be used to modulate CAM activity in mediating  
CC cell:cell interactions and subsequent cellular and biological responses,  
CC e.g. T cell activation, leukocyte transmigration and inflammation. The  
CC antisense sequences can be used for modulating the synthesis of a CAM.  
CC They can be used for treating an animal suspected of having or being  
CC prone to a disease or condition associated with a CAM. Oligonucleotides  
CC targeted to ICAM-1 can be used for treating an inflammatory disease or  
CC condition e.g. inflammatory bowel disease such as Crohn's disease,  
CC colitis or ulcerative colitis, a condition of the skin, e.g. psoriasis or  
CC cytotoxic dermatitis, rheumatoid arthritis, allograft rejection, cancer,  
CC pneumonia, multiple sclerosis or a viral infection. The ICAM-1 sequences  
CC can also be used for reducing corticosteroid use in a patient or for  
CC reducing cyclosporine use in a patient. The oligonucleotides can also be  
CC used for detection and diagnosis. They can also be used for treating e.g.  
CC hyperproliferative disorders, tumours, diapedesis, graft versus host  
CC disease, arthritis, infections, autoimmune disorders, e.g. autoimmune  
CC thyroid disorders, autoimmune forms of arthritis, multiple sclerosis,  
CC some forms of juvenile diabetes mellitus, myasthenia gravis, pemphigus  
CC vulgaris, systemic lupus erythematosus, cardiovascular disorders,  
CC myocardial ischaemia/reperfusion injury, dilated cardiomyopathy, acute  
CC myocarditis, ischaemic heart disease or stroke  
XX  
SQ Sequence 21 BP; 8 A; 3 C; 6 G; 4 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 88.2%; Pred. No. 4.5e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 2489 TGATGGGGTAATCTATA 2505  
DB 5 TGAGGGGGTAATCTACA 21  
RESULT 4809  
AAAS7738  
ID AAAS7738 standard; DNA; 21 BP.  
XX  
AC AAAS7738;  
XX  
DT 20-OCT-2000 (first entry)  
XX  
DE Oligonucleotide probe OCH37 for human RIP60 polynucleotides.  
XX  
KW Human; RIP60; zinc finger protein; nucleic acid delivery complex;  
KW nucleic acid binding domain; nucleic acid condensation domain; probe; ss.  
XX Homo sapiens.  
OS  
XX WO200040723-A2.  
PN  
XX 13-JUL-2000.  
PD  
XX 04-JAN-2000; 2000WO-US000212.  
PF  
XX 04-JAN-1999; 99US-0114743P.  
PR  
XX 04-JAN-1999; 99US-0114745P.  
PR

XX PA (UYVE-) UNIV VERMONT & STATE AGRIC COLLEGE.  
XX PI Heintz NH, Houchens CR;  
XX XX WPI; 2000-465985/40.  
DR XX Non-viral nucleic acid delivery complex for delivering a nucleic acid  
PT molecule into a cell comprises a modular polypeptide.  
XX PS Example 5; Page 103; 115pp; English.  
XX CC AAA57738-39 were annealed together and used as a probe for human RIP60.  
CC RIP60 is a zinc finger protein. The nucleic acid binding domain of the  
CC RIP60 polypeptide is used to construct a non-viral nucleic acid delivery  
CC complex comprising a modular polypeptide. The complex comprises a modular  
CC peptide containing a nucleic acid binding domain and a nucleic acid  
CC condensation domain that bind with and condense a nucleic acid molecule  
CC of more than 50 kilobases in length. The complex also comprises one or  
CC more polypeptides selected from a cell recognition domain, a protein  
CC transduction domain, a protein degradation domain, an intracellular  
CC targeting domain, a protein interaction domain, an epitope domain and a  
CC protein purification domain. The complexes are used to deliver a nucleic  
CC acid to a cell. The nucleic acids delivered are of various sizes and  
CC preferably greater than 50 kilobases, especially more than 100 or more  
CC than 200 kilobases in length  
XX SQ Sequence 21 BP; 4 A; 2 C; 3 G; 12 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 88.2%; Pred. No. 4.5e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1923 TTTTTCAGTGTAAAG 1939  
Db 4 TTTTTCAGTGTAAAG 20  
RESULT 4810  
AAA57739/C  
ID AAA57739 standard; DNA; 21 BP.  
XX AC AAA57739;  
XX DT 20-OCT-2000 (first entry)  
XX DE Oligonucleotide probe OCH38 for human RIP60 polynucleotides.  
XX KW Human; RIP60; zinc finger protein; nucleic acid delivery complex;  
KW nucleic acid binding domain; nucleic acid condensation domain; probe; ss.  
XX OS Homo sapiens.  
XX PN WO200040723-A2.  
XX PD 13-JUL-2000.  
XX PF 04-JAN-2000; 2000WO-US000212.  
XX PR 04-JAN-1999; 99US-0114743P.  
XX PR 04-JAN-1999; 99US-0114745P.  
XX PA (UYVE-) UNIV VERMONT & STATE AGRIC COLLEGE.  
XX PI Heintz NH, Houchens CR;  
XX XX WPI; 2000-465985/40.  
XX Non-viral nucleic acid delivery complex for delivering a nucleic acid  
PT molecule into a cell comprises a modular polypeptide.  
XX PS Example 5; Page 103; 115pp; English.

CC AAA57738-39 were annealed together and used as a probe for human RIP60.  
CC RIP60 is a zinc finger protein. The nucleic acid binding domain of the  
CC RIP60 polypeptide is used to construct a non-viral nucleic acid delivery  
CC complex comprising a modular polypeptide. The complex comprises a modular  
CC peptide containing a nucleic acid binding domain and a nucleic acid  
CC condensation domain that bind with and condense a nucleic acid molecule  
CC of more than 50 kilobases in length. The complex also comprises one or  
CC more polypeptides selected from a cell recognition domain, a protein  
CC transduction domain, a protein degradation domain, an intracellular  
CC targeting domain, a protein interaction domain, an epitope domain and a  
CC protein purification domain. The complexes are used to deliver a nucleic  
CC acid to a cell. The nucleic acids delivered are of various sizes and  
CC preferably greater than 50 kilobases, especially more than 100 or more  
CC than 200 kilobases in length  
XX SQ Sequence 21 BP; 12 A; 3 C; 2 G; 4 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 88.2%; Pred. No. 4.5e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1923 TTTTTCAGTGTAAAG 1939  
Db 18 TTTTTCAGTGTAAAG 2  
RESULT 4811  
AAA73988  
ID AAA73988 standard; DNA; 21 BP.  
XX AC AAA73988;  
XX DT 08-JAN-2001 (first entry)  
DE HIV primer 2ENV-R2.  
XX KW Human immunodeficiency virus; HIV; internal positive control; IPC;  
KW target DNA; nucleic acid amplification; infection;  
KW microorganism detection; PCR primer; ss.  
XX OS Human immunodeficiency virus.  
XX PN EP1026261-A2.  
XX PD 09-AUG-2000.  
XX PF 01-FEB-2000; 2000EP-00300790.  
XX PR 03-FEB-1999; 99US-0118495P.  
XX PA (ORTH ) ORTHO CLINICAL DIAGNOSTICS INC.  
PI Preston GM, Backus JW;  
XX WPI; 2000-516095/47.  
XX PT Reducing primer-dimer formation during target nucleic acid amplification  
PT involves contacting primer-carrier admixture comprising amplification  
PT primers and carrier nucleic acid with target nucleic acid.  
XX PS Example 1; Page 5; 12pp; English.  
XX CC The present sequence is a PCR primer used in an experiment to monitor the  
CC effect of adding carrier nucleic acid to a HIV amplification reaction.  
CC The reaction reagents include a target nucleic acid, one or more  
CC oligonucleotide amplification primers specific to the target nucleic  
CC acid, a nucleic acid polymerase and one or more magnesium salts. An  
CC internal positive control (IPC) DNA was used as the target nucleic acid.  
CC An IPC nucleic acid is a synthetic nucleic acid sequence cloned into a  
CC plasmid vector which is subsequently linearised, typically by the action  
CC of a restriction endonuclease. An IPC will typically have multiple primer  
CC binding sequences surrounding a generic probe-binding region, and acts as  
CC a generic control against false negative results in nucleic acid



CC amplification reactions. The present sequence was used in an example of  
CC methods for enhancing the specificity of nucleic acid amplification by  
CC carrier nucleic acid. The methods are useful in diagnostic tests for  
CC infectious microorganisms

XX Sequence 21 BP; 6 A; 8 C; 5 G; 2 T; 0 U; 0 Other;  
SQ

Query Match 0.5%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 88.2%; Pred. No. 4.5e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 734 CAGACAGTCATTCGCAA 750  
||||| ||||| |||||  
Db 3 CAGACGGTCAGTCGCAA 19

RESULT 4812  
ADE80908/C  
ID ADE80908 standard; DNA; 21 BP.  
XX  
AC ADE80908;  
XX  
XX  
DT 29-JAN-2004 (first entry)  
XX  
DE Streptococcus pneumoniae yphC gene PCR primer #3.  
XX  
KW yphC; yqjK; antibacterial agent; bacterial infection; PCR; primer; ss.  
XX  
OS Streptococcus pneumoniae.  
XX  
XX  
PN WO200014200-A2.  
XX  
PD 16-MAR-2000.  
XX  
XX  
PF 09-SEP-1999; 99WO-US020993.  
XX  
XX  
PR 09-SEP-1998; 98US-0099578P.  
XX  
XX  
PA (MILL-) MILLENNIUM PHARM INC.  
XX  
XX  
PI Fritz C, Youngman P, Guzman L;  
XX  
DR WPI; 2000-256958/22.  
XX  
XX  
PT Isolated nucleic acid molecule encoding bacterial yphC and yqjK  
PT polypeptides is used for identifying antibacterial agents.  
XX  
XX  
PS Disclosure; SEQ ID NO 30; 85pp; English.  
XX  
XX  
CC The invention comprises the DNA and corresponding protein sequences of  
CC two genes, termed "yphC" and "yqjK" from Streptococcus pneumoniae, which  
CC are essential for the survival of a wide range of bacteria. The DNA and  
CC protein sequences of the invention are useful for identifying  
CC antibacterial agents for the treatment of a bacterial infection (e.g.  
CC Streptococcus pneumoniae). The present DNA sequence represents a PCR  
CC primer that was used in the exemplification of the invention.

XX Sequence 21 BP; 2 A; 6 C; 6 G; 7 T; 0 U; 0 Other;  
SQ

Query Match 0.5%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 88.2%; Pred. No. 4.5e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 460 CCAGCAGCAGGCGCTGGC 476  
||||| ||||| |||||  
Db 21 CCAGCAACAGGACTGGC 5

RESULT 4813  
AAS06843/C  
ID AAS06843 standard; DNA; 21 BP.  
XX  
XX  
AC AAS06843;

XX  
DT 12-SEP-2001 (first entry)  
XX  
XX SNP containing protein kinase DNA sequence #12.  
DE  
XX  
XX  
KW Human; protein kinase; PTK; STK; cancer; cardiovascular disease; SNP;  
KW metabolic disorder; immune related disease; neurological disorder;  
KW neurodegenerative disorder; inflammatory disorder; infectious disease;  
KW reproductive disorder; gene therapy; single nucleotide polymorphism; ds.  
XX  
OS Homo sapiens.  
XX  
XX WO200138503-A2.  
XX  
XX 31-MAY-2001.  
XX  
XX 22-NOV-2000; 2000WO-US032085.  
XX  
XX 24-NOV-1999; 99US-0167482P.  
XX  
XX (SUGE-) SUGEN INC.  
XX  
XX Plowman GD, Whyte D, Manning G, Sudarsanam S, Martinez R;  
PI Flanagan P, Clary D;  
PI  
XX  
XX WPI; 2001-343950/36.  
XX  
XX Nucleic acids encoding human kinase polypeptides, useful for preventing  
PT diagnosing and/or treating e.g. cancer, immune, cardiovascular and  
PT neuronal-associated diseases, and microbial infections.  
XX  
XX Example 8B; Page 329; 433pp; English.  
XX  
XX AAS06832-AAS06897 represent part of a polynucleotide sequence encoding  
CC for novel human protein kinases where a single nucleotide polymorphism  
CC (SNP) has been identified. The SNP occurs at the last position of the  
CC present sequence. The sequences are described relating to the invention  
CC of novel human protein kinases #1-57 (AAU03501-AAU03557). The novel  
CC protein kinases have been identified as members of the tyrosine or  
CC serine/threonine kinase (PTK and STK) families. The polynucleotides  
CC encoding protein kinases and the polypeptides may be used in the  
CC prevention, diagnosis and treatment of diseases associated with  
CC inappropriate kinase expression. For example, they may be used to treat  
CC cancers (especially cancers of haematopoietic origin), cardiovascular  
CC disease (e.g. atherosclerosis), metabolic disorders (e.g. diabetes),  
CC immune related diseases (e.g. rheumatoid arthritis), neurological  
CC disorders (e.g. schizophrenia), neurodegenerative disorders (e.g.  
CC Parkinson's disease), inflammatory disorders (e.g. asthma), infectious  
CC disease (e.g. HIV) and reproductive disorders (e.g. infertility).  
CC Additionally, polynucleotides encoding protein kinases may be used for  
CC gene therapy and as DNA probes in diagnostic assays. The protein kinase  
CC polypeptides may be used as antigens in the production of antibodies  
CC against the protein kinases and in assays to identify modulators of  
CC protein kinase expression and activity

XX Sequence 21 BP; 3 A; 7 C; 5 G; 5 T; 0 U; 1 Other;  
SQ

Query Match 0.5%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 88.2%; Pred. No. 4.5e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 704 GTCGACGACGACGACCT 720  
||||| ||||| |||||  
Db 18 GTCGAAGACGACGACGT 2

RESULT 4814  
AAF97680  
ID AAF97680 standard; DNA; 21 BP.  
XX  
XX AAF97680;  
XX  
XX 06-JUN-2001 (first entry)  
DT

XX DE Human gene single nucleotide polymorphism #2441.  
XX KW Human; variant thrombospondin 1; variant thrombospondin 4; SNP;  
KW polymorphism; vascular disease; coronary artery disease; forensics;  
KW myocardial infarction; atherosclerosis; stroke; venous thromboembolism;  
XX pulmonary embolism; paternity test; ds.  
OS Homo sapiens.  
XX FH Key Location/Qualifiers  
XX FT Variation replace(11,G)  
FT /\*tag= a  
FT /standard\_name= "single nucleotide polymorphism"  
XX WO200118250-A2.  
XX PD 15-MAR-2001.  
XX PF 07-SEP-2000; 2000WO-US024503.  
XX PR 10-SEP-1999; 99US-01533357P.  
PR 26-JUL-2000; 2000US-0220947P.  
PR 16-AUG-2000; 2000US-0225724P.  
XX (WHED ) WHITEHEAD INST BIOMEDICAL RES.  
PA (MILL-) MILLENNIUM PHARM INC.  
XX Lander ES, Gargill M, Ireland JS, Bolk S, Daley GQ, McCarthy JJ;  
XX WPI; 2001-226749/23.  
XX Nucleic acids comprising single nucleotide polymorphisms, useful in  
PT applications such as forensics, paternity testing, medicine, genetic  
PT analysis and phenotype correlations to diseases such as diabetes and  
PT atherosclerosis.  
XX Example; Page 213; 242pp; English.  
XX The present invention provides a method of diagnosing a vascular disease  
CC in an individual, involving determining the sequence at various  
CC polymorphic sites within the human thrombospondin 1 and thrombospondin 4  
CC genes. The sequences at a number of polymorphic sites are also provided  
CC in the specification. In particular, the method can be used in the  
CC diagnosis of atherosclerosis, myocardial infarction, coronary heart  
CC disease, stroke, peripheral vascular diseases, venous thromboembolism and  
CC pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also  
CC useful in forensics, paternity testing, genetic analysis and phenotype  
CC correlations to diseases. The present sequence is an example of one of  
CC the human gene SNPs shown in the specification  
XX SQ Sequence 21 BP; 7 A; 8 C; 3 G; 3 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 88.2%; Pred. No. 4.5e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1062 TGACTCTCTCTGACATCC 1078  
Db ||||| ||||| ||||| |||||  
2 TGACACCCCTGACATCC 18  
RESULT 4815  
AAF97544  
ID AAF97544 standard; DNA; 21 BP.  
XX AC AAF97544;  
XX 06-JUN-2001 (first entry)  
XX DE Human gene single nucleotide polymorphism #2305.  
XX KW Human; variant thrombospondin 1; variant thrombospondin 4; SNP;  
KW polymorphism; vascular disease; coronary artery disease; forensics;  
KW myocardial infarction; atherosclerosis; stroke; venous thromboembolism;  
XX pulmonary embolism; paternity test; ds.

KW polymorphism; vascular disease; coronary artery disease; forensics;  
KW myocardial infarction; atherosclerosis; stroke; venous thromboembolism;  
XX pulmonary embolism; paternity test; ds.  
OS Homo sapiens.  
XX FH Key Location/Qualifiers  
XX FT Variation replace(11,t)  
FT /\*tag= a  
FT /standard\_name= "single nucleotide polymorphism"  
XX WO200118250-A2.  
XX PD 15-MAR-2001.  
XX PF 07-SEP-2000; 2000WO-US024503.  
XX PR 10-SEP-1999; 99US-01533357P.  
PR 26-JUL-2000; 2000US-0220947P.  
PR 16-AUG-2000; 2000US-0225724P.  
XX (WHED ) WHITEHEAD INST BIOMEDICAL RES.  
PA (MILL-) MILLENNIUM PHARM INC.  
XX Lander ES, Gargill M, Ireland JS, Bolk S, Daley GQ, McCarthy JJ;  
XX WPI; 2001-226749/23.  
XX Nucleic acids comprising single nucleotide polymorphisms, useful in  
PT applications such as forensics, paternity testing, medicine, genetic  
PT analysis and phenotype correlations to diseases such as diabetes and  
PT atherosclerosis.  
XX Example; Page 205; 242pp; English.  
XX The present invention provides a method of diagnosing a vascular disease  
CC in an individual, involving determining the sequence at various  
CC polymorphic sites within the human thrombospondin 1 and thrombospondin 4  
CC genes. The sequences at a number of polymorphic sites are also provided  
CC in the specification. In particular, the method can be used in the  
CC diagnosis of atherosclerosis, myocardial infarction, coronary heart  
CC disease, stroke, peripheral vascular diseases, venous thromboembolism and  
CC pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also  
CC useful in forensics, paternity testing, genetic analysis and phenotype  
CC correlations to diseases. The present sequence is an example of one of  
CC the human gene SNPs shown in the specification  
XX SQ Sequence 21 BP; 4 A; 8 C; 6 G; 3 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 88.2%; Pred. No. 4.5e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 232 CAGCAATGGGATCCGC 248  
Db ||||| ||||| ||||| |||||  
1 CAGCAATGGGCATCCCC 17  
RESULT 4816  
AAF97617/c  
ID AAF97617 standard; DNA; 21 BP.  
XX AC AAF97617;  
XX 06-JUN-2001 (first entry)  
XX DE Human gene single nucleotide polymorphism #2378.  
XX KW Human; variant thrombospondin 1; variant thrombospondin 4; SNP;  
KW polymorphism; vascular disease; coronary artery disease; forensics;  
KW myocardial infarction; atherosclerosis; stroke; venous thromboembolism;  
XX pulmonary embolism; paternity test; ds.

```
FT XX Homo sapiens.
FT XX Key Location/Qualifiers
XX XX Variation replace(11,T)
XX XX /*tag= a
XX XX /standard_name= "single nucleotide polymorphism"
XX XX WO200118250-A2.
XX XX 15-MAR-2001.
XX XX 07-SEP-2000; 2000WO-US024503.
XX XX 10-SEP-1999; 99US-0153357P.
XX XX 26-JUL-2000; 2000US-0220947P.
XX XX 16-AUG-2000; 2000US-0225724P.
XX XX (WHED ) WHITEHEAD INST BIOMEDICAL RES.
XX XX (MILL-) MILLENNIUM PHARM INC.
XX XX Lander ES, Gargill M, Ireland JS, Bolk S, Daley GQ, Mccarthy JJ;
XX XX WPI; 2001-226749/23.
XX XX Nucleic acids comprising single nucleotide polymorphisms, useful in
XX XX applications such as forensics, paternity testing, medicine, genetic
XX XX analysis and phenotype correlations to diseases such as diabetes and
XX XX atherosclerosis.
XX XX Example; Page 210; 242pp; English.
XX XX The present invention provides a method of diagnosing a vascular disease
XX XX in an individual, involving determining the sequence at various
XX XX polymorphic sites within the human thrombospondin 1 and thrombospondin 4
XX XX genes. The sequences at a number of polymorphic sites are also provided
XX XX in the specification. In particular, the method can be used in the
XX XX diagnosis of atherosclerosis, myocardial infarction, coronary heart
XX XX disease, stroke, peripheral vascular diseases, venous thromboembolism and
XX XX pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also
XX XX useful in forensics, paternity testing, genetic analysis and phenotype
XX XX correlations to diseases. The present sequence is an example of one of
XX XX the human gene SNPs shown in the specification
XX XX Sequence 21 BP; 11 A; 4 C; 3 G; 3 T; 0 U; 0 Other;
XX XX Query Match 0.5%; Score 13.8; DB 1; Length 21;
XX XX Best Local Similarity 88.2%; Pred. No. 4.5e+03;
XX XX Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1505 AACACACAGGAATAAAA 1521
Db 5 AAATACCTGGAAATAAAA 21
RESULT 4818
AAF96104
ID AAF96104 standard; DNA; 21 BP.
XX XX
AC AAF96104;
XX XX
DT 06-JUN-2001 (first entry)
XX XX Human gene single nucleotide polymorphism #865.
XX XX Human; variant thrombospondin 1; variant thrombospondin 4; SNP;
XX XX polymorphism; vascular disease; coronary artery disease; forensics;
XX XX myocardial infarction; atherosclerosis; stroke; venous thromboembolism;
XX XX pulmonary embolism; paternity test; ds.
XX XX Homo sapiens.
XX XX Key Location/Qualifiers
XX XX Variation replace(11,A)
XX XX /*tag= a
XX XX /standard_name= "single nucleotide polymorphism"
XX XX WO200118250-A2.
```

```
OS XX Homo sapiens.
XX XX Key Location/Qualifiers
XX XX Variation replace(11,T)
XX XX /*tag= a
XX XX /standard_name= "single nucleotide polymorphism"
XX XX WO200118250-A2.
XX XX 15-MAR-2001.
XX XX 07-SEP-2000; 2000WO-US024503.
XX XX 10-SEP-1999; 99US-0153357P.
XX XX 26-JUL-2000; 2000US-0220947P.
XX XX 16-AUG-2000; 2000US-0225724P.
XX XX (WHED ) WHITEHEAD INST BIOMEDICAL RES.
XX XX (MILL-) MILLENNIUM PHARM INC.
XX XX Lander ES, Gargill M, Ireland JS, Bolk S, Daley GQ, Mccarthy JJ;
XX XX WPI; 2001-226749/23.
XX XX Nucleic acids comprising single nucleotide polymorphisms, useful in
XX XX applications such as forensics, paternity testing, medicine, genetic
XX XX analysis and phenotype correlations to diseases such as diabetes and
XX XX atherosclerosis.
XX XX Example; Page 210; 242pp; English.
XX XX The present invention provides a method of diagnosing a vascular disease
XX XX in an individual, involving determining the sequence at various
XX XX polymorphic sites within the human thrombospondin 1 and thrombospondin 4
XX XX genes. The sequences at a number of polymorphic sites are also provided
XX XX in the specification. In particular, the method can be used in the
XX XX diagnosis of atherosclerosis, myocardial infarction, coronary heart
XX XX disease, stroke, peripheral vascular diseases, venous thromboembolism and
XX XX pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also
XX XX useful in forensics, paternity testing, genetic analysis and phenotype
XX XX correlations to diseases. The present sequence is an example of one of
XX XX the human gene SNPs shown in the specification
XX XX Sequence 21 BP; 7 A; 4 C; 5 G; 5 T; 0 U; 0 Other;
XX XX Query Match 0.5%; Score 13.8; DB 1; Length 21;
XX XX Best Local Similarity 88.2%; Pred. No. 4.5e+03;
XX XX Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1128 GTGAAGCCGATTCCT 1144
Db 21 GTTAAGCCGAGTTTCCT 5
RESULT 4817
AAF97628
ID AAF97628 standard; DNA; 21 BP.
XX XX
AC AAF97628;
XX XX
DT 06-JUN-2001 (first entry)
XX XX Human gene single nucleotide polymorphism #2389.
XX XX Human; variant thrombospondin 1; variant thrombospondin 4; SNP;
XX XX polymorphism; vascular disease; coronary artery disease; forensics;
XX XX myocardial infarction; atherosclerosis; stroke; venous thromboembolism;
XX XX pulmonary embolism; paternity test; ds.
XX XX Homo sapiens.
XX XX Key Location/Qualifiers
XX XX Variation replace(11,G)
```

XX 15-MAR-2001.  
PD 07-SEP-2000; 2000WO-US024503.  
XX 10-SEP-1999; 99US-0153357P.  
XX 26-JUL-2000; 2000US-0220947P.  
XX 16-AUG-2000; 2000US-0225724P.  
PA (WHED ) WHITEHEAD INST BIOMEDICAL RES.  
PA (MILL-) MILLENNIUM PHARM INC.  
XX Lander ES, Gargill M, Ireland JS, Bolk S, Daley GQ, Mccarthy JJ;  
XX WPI; 2001-226749/23.  
XX Nucleic acids comprising single nucleotide polymorphisms, useful in  
PT applications such as forensics, paternity testing, medicine, genetic  
PT analysis and phenotype correlations to diseases such as diabetes and  
PT atherosclerosis.  
XX Example; Page 109; 242pp; English.  
XX The present invention provides a method of diagnosing a vascular disease  
CC in an individual, involving determining the sequence at various  
CC polymorphic sites within the human thrombospondin 1 and thrombospondin 4  
CC genes. The sequences at a number of polymorphic sites are also provided  
CC in the specification. In particular, the method can be used in the  
CC diagnosis of atherosclerosis, myocardial infarction, coronary heart  
CC disease, stroke, peripheral vascular diseases, venous thromboembolism and  
CC pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also  
CC useful in forensics, paternity testing, genetic analysis and phenotype  
CC correlations to diseases. The present sequence is an example of one of  
CC the human gene SNPs shown in the specification  
XX SQ Sequence 21 BP; 8 A; 6 C; 6 G; 1 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 88.2%; Pred. No. 4.5e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1455 CTGGAGACCAGAGTCCA 1471  
Db 1 CTGGAGACAAAGACCCA 17  
RESULT 4819  
AAF96440  
ID AAF96440 standard; DNA; 21 BP.  
XX AAF96440;  
AC AAF96440;  
XX 06-JUN-2001 (first entry)  
DT Human gene single nucleotide polymorphism #1201.  
XX Human; variant thrombospondin 1; variant thrombospondin 4; SNP;  
KW polymorphism; vascular disease; coronary artery disease; forensics;  
KW myocardial infarction; atherosclerosis; stroke; venous thromboembolism;  
KW pulmonary embolism; paternity test; ds.  
XX Homo sapiens.  
OS Homo sapiens.  
XX Key Location/Qualifiers  
FH Variation replace(11,A)  
FT /\*tag= a  
FT /standard\_name= "single nucleotide polymorphism"  
XX WO200118250-A2.  
PN 15-MAR-2001.  
XX 07-SEP-2000; 2000WO-US024503.  
XX 10-SEP-1999; 99US-0153357P.  
XX 26-JUL-2000; 2000US-0220947P.  
PF 07-SEP-2000; 2000WO-US024503.

XX 10-SEP-1999; 99US-0153357P.  
PR 26-JUL-2000; 2000US-0220947P.  
PR 16-AUG-2000; 2000US-0225724P.  
XX (WHED ) WHITEHEAD INST BIOMEDICAL RES.  
PA (MILL-) MILLENNIUM PHARM INC.  
XX Lander ES, Gargill M, Ireland JS, Bolk S, Daley GQ, Mccarthy JJ;  
PI WPI; 2001-226749/23.  
XX Nucleic acids comprising single nucleotide polymorphisms, useful in  
PT applications such as forensics, paternity testing, medicine, genetic  
PT analysis and phenotype correlations to diseases such as diabetes and  
PT atherosclerosis.  
XX Example; Page 133; 242pp; English.  
XX The present invention provides a method of diagnosing a vascular disease  
CC in an individual, involving determining the sequence at various  
CC polymorphic sites within the human thrombospondin 1 and thrombospondin 4  
CC genes. The sequences at a number of polymorphic sites are also provided  
CC in the specification. In particular, the method can be used in the  
CC diagnosis of atherosclerosis, myocardial infarction, coronary heart  
CC disease, stroke, peripheral vascular diseases, venous thromboembolism and  
CC pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also  
CC useful in forensics, paternity testing, genetic analysis and phenotype  
CC correlations to diseases. The present sequence is an example of one of  
CC the human gene SNPs shown in the specification  
XX SQ Sequence 21 BP; 6 A; 6 C; 7 G; 2 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 88.2%; Pred. No. 4.5e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1584 GCACAGACTGGGAACCC 1600  
Db 1 GCTCAGACAGGGAACCC 17  
RESULT 4820  
AAF97321  
ID AAF97321 standard; DNA; 21 BP.  
XX AAF97321;  
AC AAF97321;  
XX 06-JUN-2001 (first entry)  
DT Human gene single nucleotide polymorphism #2082.  
XX Human; variant thrombospondin 1; variant thrombospondin 4; SNP;  
KW polymorphism; vascular disease; coronary artery disease; forensics;  
KW myocardial infarction; atherosclerosis; stroke; venous thromboembolism;  
KW pulmonary embolism; paternity test; ds.  
XX Homo sapiens.  
OS Homo sapiens.  
XX Key Location/Qualifiers  
FH Variation replace(11,A)  
FT /\*tag= a  
FT /standard\_name= "single nucleotide polymorphism"  
XX WO200118250-A2.  
PN 15-MAR-2001.  
XX 07-SEP-2000; 2000WO-US024503.  
XX 10-SEP-1999; 99US-0153357P.  
XX 26-JUL-2000; 2000US-0220947P.  
PR 16-AUG-2000; 2000US-0225724P.







AC AAF85206;  
XX  
DT 09-JUL-2001 (first entry)  
XX  
DE PCR primer used to amplify a probe for cDNA encoding ZmMAD3.  
XX  
KW MAD3; ZmMAD3; flower development; flower structure; seed development;  
KW fruit development; transgenic plant; PCR primer; ss.  
XX  
OS Zea mays.  
XX WO200131017-A2.  
XX  
PD 03-MAY-2001.  
XX  
PF 25-OCT-2000; 2000WO-EP010484.  
XX  
XX 25-OCT-1999; 99EP-00120842.  
PR (SUED-) SUEDWESTDEUTSCHE SAATZUCHT.  
XX  
XX Dresselhaus T, Heuer S, Loerz H;  
PI  
XX WPI; 2001-316335/33.  
DR  
XX New polynucleotide encoding ZmMADS3 protein, for use in cloning and  
PT expression in plant a nucleic acid sequence encoding protein influencing  
PT flower structure, function and/or its seed and/or fruit development.  
PT  
XX Example 3; Page 70; 71pp; English.  
PS  
XX PCR primers AAF85204-05 were used to amplify a probe for cDNA encoding a  
CC maize MAD3 gene, designated ZmMADS3. The ZmMAD3 protein is essential for  
CC flower development and is active in flowers, in particular, in immature  
CC flowers and female flowers, but also in the mature embryo sac of maize.  
CC The ZmMAD3 protein is also active in nodes and adjacent cell layers.  
CC ZmMAD3 polynucleotides and polypeptides are useful influencing flower  
CC structure, function and seed or fruit development in transgenic plants  
XX  
SQ Sequence 21 BP; 5 A; 4 C; 4 G; 8 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 88.2%; Pred. No. 4.5e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 2516 AGGTTTATTTCATATAT 2532  
Db 3 AGGTTTATTTCATGCAT 19  
  
RESULT 4826  
AAH89104/C  
ID AAH89104 standard; DNA; 21 BP.  
XX  
AC AAH89104;  
XX  
DT 27-FEB-2002 (first entry)  
XX  
DE Human polymorphic oligonucleotide M84129 fragment #11.  
XX  
KW Human; single nucleotide polymorphic; SNP; forensic science;  
KW paternity testing; phenotypic trait; genetic mapping; animal breeding;  
KW plant breeding; ds.  
XX  
OS Homo sapiens.  
XX  
FH Key Location/Qualifiers  
FT Variation replace(11,c)  
FT /\*tag= a  
FT /standard\_name= "single nucleotide polymorphism"  
XX  
PN WO200134840-A2.  
XX

PD 17-MAY-2001.  
XX  
PF 10-NOV-2000; 2000WO-US030766.  
XX  
PR 10-NOV-1999; 99US-0164596P.  
XX  
PA (GLAXO) GLAXO GROUP LTD.  
PA (AFFY-) AFFYMETRIX INC.  
XX  
PI Au K, Chen J, Patil N, Thomas D;  
XX  
XX WPI; 2001-335945/35.  
DR  
XX New polymorphic sites derived from the human genome are useful to  
PT determine sites correlating with phenotypic traits, particularly disease,  
PT and also in forensics and paternity testing.  
PT  
XX Claim 85; Page 13; 43pp; English.  
PS  
XX The present invention relates to human oligonucleotides comprising a  
CC single nucleotide polymorphic site (SNP: AAH88797-AAH89219). The present  
CC sequence is one such oligonucleotide. The oligonucleotides can be used in  
CC forensics, paternity testing, correlation of polymorphisms with  
CC phenotypic traits, genetic mapping of phenotypic traits and marker  
CC assisted breeding of animals and crop plants  
XX  
SQ Sequence 21 BP; 4 A; 5 C; 6 G; 6 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 88.2%; Pred. No. 4.5e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 2492 TGGGGTAATCTATAACA 2508  
Db 18 TGGGGTAATCCATCACA 2  
  
RESULT 4827  
AAS11076  
ID AAS11076 standard; DNA; 21 BP.  
XX  
AC AAS11076;  
XX  
DT 24-OCT-2001 (first entry)  
XX  
DE Bacterial 16S RNA antisense oligomer #42.  
XX  
KW Antisense; bacterial 16S ribosomal RNA; rRNA; bacterial infection; human;  
KW food grain supplement; livestock; poultry; therapeutic; ss.  
XX  
OS Mycobacterium tuberculosis.  
XX  
XX WO200142457-A2.  
XX  
PD 14-JUN-2001.  
XX  
PF 29-NOV-2000; 2000WO-US042391.  
XX  
PR 29-NOV-1999; 99US-0168150P.  
XX  
PA (AVIB-) AVI BIOPHARMA INC.  
XX  
PI Iversen PL;  
XX  
XX WPI; 2001-457295/49.  
DR  
XX Antibacterial compound, useful for treating bacterial infections and as  
PT livestock and poultry food supplement, comprises antisense  
PT oligonucleotides complementary to bacterial 16S and 23S rRNA.  
XX  
PS Disclosure; Page 28; 62pp; English.  
XX  
XX AAS11035-AAS11157 represent the coding sequences of bacterial 16S  
CC

CC ribosomal RNA (rRNA) antisense oligomers. These sequences are  
CC antibacterial compounds comprising substantially unchanged antisense  
CC oligomers containing 8-40 nucleotide subunits, including a targeting  
CC nucleic acid sequence at least 10 nucleotides in length which is  
CC complementary to a bacterial 16S or 23S rRNA nucleic acid sequence. The  
CC antisense oligomers are used for treating a bacterial infection in a  
CC human or a mammalian animal produced by Escherichia coli, Salmonella  
CC typhimurium, Pseudomonas aeruginosa, Vibrio cholera, Neisseria  
CC gonorrhoea, Helicobacter pylori, Bartonella henselae, Haemophilus  
CC influenza, Shigella dysenteriae, Staphylococcus aureus, Mycobacterium  
CC tuberculosis, Streptococcus pneumoniae, Treponema palladium and Chlamydia  
CC trachomatis. The antibacterial compound may be used as a food grain  
CC supplement in livestock and poultry food composition  
XX  
SQ Sequence 21 BP; 3 A; 9 C; 3 G; 6 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 88.2%; Pred. No. 4.5e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 1393 GTCTGCCCTGCAGAACT 1409  
Db 3 GTCTCCCTGCAGTACT 19  
  
RESULT 4828  
AAS11058  
ID AAS11058 standard; DNA; 21 BP.  
XX  
AC AAS11058;  
XX  
DT 24-OCT-2001 (first entry)  
XX  
DE Bacterial 16S RNA antisense oligomer #24.  
XX  
KW Antisense; bacterial 16S ribosomal RNA; rRNA; bacterial infection; human;  
KW food grain supplement; livestock; poultry; therapeutic; ss.  
XX  
OS Pseudomonas aeruginosa.  
XX  
PN WO200142457-A2.  
XX  
PD 14-JUN-2001.  
XX  
PF 29-NOV-2000; 2000WO-US042391.  
XX  
PR 29-NOV-1999; 99US-0168150P.  
XX  
PA (AVIB-) AVI BIOPHARMA INC.  
XX  
PI Iversen PL;  
XX  
DR WPI; 2001-457295/49.  
XX  
PT Antibacterial compound, useful for treating bacterial infections and as  
PT livestock and poultry food supplement, comprises antisense  
PT oligonucleotides complementary to bacterial 16S and 23S rRNA.  
XX  
PS Disclosure; Page 26; 62pp; English.  
XX  
CC AAS11035-AAS11157 represent the coding sequences of bacterial 16S  
CC ribosomal RNA (rRNA) antisense oligomers. These sequences are  
CC antibacterial compounds comprising substantially unchanged antisense  
CC oligomers containing 8-40 nucleotide subunits, including a targeting  
CC nucleic acid sequence at least 10 nucleotides in length which is  
CC complementary to a bacterial 16S or 23S rRNA nucleic acid sequence. The  
CC antisense oligomers are used for treating a bacterial infection in a  
CC human or a mammalian animal produced by Escherichia coli, Salmonella  
CC typhimurium, Pseudomonas aeruginosa, Vibrio cholera, Neisseria  
CC gonorrhoea, Helicobacter pylori, Bartonella henselae, Haemophilus  
CC influenza, Shigella dysenteriae, Staphylococcus aureus, Mycobacterium  
CC tuberculosis, Streptococcus pneumoniae, Treponema palladium and Chlamydia  
CC trachomatis. The antibacterial compound may be used as a food grain

CC supplement in livestock and poultry food composition  
XX  
SQ Sequence 21 BP; 6 A; 7 C; 4 G; 4 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 88.2%; Pred. No. 4.5e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 2009 CAGAGATCAAGTCTCT 2025  
Db 1 CAGAGAGCAAGCCTCT 17  
  
RESULT 4829  
AAS11038/c  
ID AAS11038 standard; DNA; 21 BP.  
XX  
AC AAS11038;  
XX  
DT 24-OCT-2001 (first entry)  
XX  
DE Bacterial 16S RNA antisense oligomer #4.  
XX  
KW Antisense; bacterial 16S ribosomal RNA; rRNA; bacterial infection; human;  
KW food grain supplement; livestock; poultry; therapeutic; ss.  
XX  
OS Salmonella typhimurium.  
XX  
PN WO200142457-A2.  
XX  
PD 14-JUN-2001.  
XX  
PF 29-NOV-2000; 2000WO-US042391.  
XX  
PR 29-NOV-1999; 99US-0168150P.  
XX  
PA (AVIB-) AVI BIOPHARMA INC.  
XX  
PI Iversen PL;  
XX  
DR WPI; 2001-457295/49.  
XX  
PT Antibacterial compound, useful for treating bacterial infections and as  
PT livestock and poultry food supplement, comprises antisense  
PT oligonucleotides complementary to bacterial 16S and 23S rRNA.  
XX  
PS Disclosure; Page 26; 62pp; English.  
XX  
CC AAS11035-AAS11157 represent the coding sequences of bacterial 16S  
CC ribosomal RNA (rRNA) antisense oligomers. These sequences are  
CC antibacterial compounds comprising substantially unchanged antisense  
CC oligomers containing 8-40 nucleotide subunits, including a targeting  
CC nucleic acid sequence at least 10 nucleotides in length which is  
CC complementary to a bacterial 16S or 23S rRNA nucleic acid sequence. The  
CC antisense oligomers are used for treating a bacterial infection in a  
CC human or a mammalian animal produced by Escherichia coli, Salmonella  
CC typhimurium, Pseudomonas aeruginosa, Vibrio cholera, Neisseria  
CC gonorrhoea, Helicobacter pylori, Bartonella henselae, Haemophilus  
CC influenza, Shigella dysenteriae, Staphylococcus aureus, Mycobacterium  
CC tuberculosis, Streptococcus pneumoniae, Treponema palladium and Chlamydia  
CC trachomatis. The antibacterial compound may be used as a food grain  
CC supplement in livestock and poultry food composition  
XX  
SQ Sequence 21 BP; 6 A; 6 C; 4 G; 5 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 88.2%; Pred. No. 4.5e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 169 GTTGTGGAAATAACCG 185  
Db 21 GTTGTGGTTAATAACCG 5



RESULT 4830  
ABK53146/C  
ID ABK53146 standard; DNA; 21 BP.  
XX  
AC ABK53146;  
XX  
DT 29-AUG-2003 (revised)  
DT 12-AUG-2002 (first entry)  
XX  
DE HIV-1 Gag gene specific oligonucleotide primer #10.  
XX  
KW HIV; human immunodeficiency virus; ss; primer; gag; pol; protease;  
KW reverse transcriptase; infection; PCR.  
XX  
OS Human immunodeficiency virus 1.  
XX  
PN US2002055095-A1.  
XX  
PD 09-MAY-2002.  
XX  
PF 31-AUG-2001; 2001US-00944036.  
XX  
PR 01-SEP-2000; 2000US-0229790P.  
XX  
PA (YANG/) YANG Y Y.  
PA (BREN/) BRENTANO S T.  
PA (BABO/) BABOLA O.  
PA (TRAN/) TRAN N.  
PA (VERN/) VERNET G.  
XX  
PI Yang YY, Brentano ST, Babola O, Tran N, Vernet G;  
XX  
XX WPI; 2002-462902/49.  
DR  
XX  
PT New nucleic acid oligomers for amplifying a nucleotide sequence from HIV-  
PT 1 and probes for detecting the amplified product are specific for gag and  
PT pol regions and are useful to detect different subtypes of HIV-1.  
XX  
PS Claim 1; Page 27; 37pp; English.  
XX  
CC This invention relates to a series of nucleic acid oligomers for  
CC amplifying and detecting a nucleotide sequence of human immunodeficiency  
CC virus type 1 (HIV-1). The invention also comprises a labeled  
CC oligonucleotide that specifically hybridises to an HIV-1 sequence derived  
CC from gag or pol sequences, having one of the sequences fully defined in  
CC the specification, and a method for detecting HIV-1 in a biological  
CC sample, comprising mixing the sample with two or more of the  
CC amplification oligomers that specifically amplify at least one HIV-1  
CC target sequence within gag and a pol sequence which is a protease or  
CC reverse transcriptase sequence, amplifying the target, and detecting the  
CC amplified product. The oligonucleotides of the invention may be used to  
CC diagnose HIV-1 infection. The presents sequence represents a PCR primer  
CC used to amplify the HIV-1 Gag gene in the HIV detection method of the  
CC invention. (Updated on 29-AUG-2003 to standardise OS field)  
XX  
SQ Sequence 21 BP; 3 A; 5 C; 5 G; 8 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 88.2%; Pred. No. 4.5e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1729 ATTATCAGAGGTGACA 1745  
DB 18 ATTATCAGAGGAGGCCA 2  
RESULT 4831  
ABK53111/C  
ID ABK53111 standard; DNA; 21 BP.  
XX  
AC ABK53111;  
XX

DT 29-AUG-2003 (revised)  
DT 12-AUG-2002 (first entry)  
XX  
DE HIV-1 Gag gene specific oligonucleotide primer #3.  
XX  
KW HIV; human immunodeficiency virus; ss; primer; gag; pol; protease;  
KW reverse transcriptase; infection; PCR.  
XX  
OS Human immunodeficiency virus 1.  
XX  
PN US2002055095-A1.  
XX  
PD 09-MAY-2002.  
XX  
PF 31-AUG-2001; 2001US-00944036.  
XX  
PR 01-SEP-2000; 2000US-0229790P.  
XX  
PA (YANG/) YANG Y Y.  
PA (BREN/) BRENTANO S T.  
PA (BABO/) BABOLA O.  
PA (TRAN/) TRAN N.  
PA (VERN/) VERNET G.  
XX  
PI Yang YY, Brentano ST, Babola O, Tran N, Vernet G;  
XX  
XX WPI; 2002-462902/49.  
DR  
XX  
PT New nucleic acid oligomers for amplifying a nucleotide sequence from HIV-  
PT 1 and probes for detecting the amplified product are specific for gag and  
PT pol regions and are useful to detect different subtypes of HIV-1.  
XX  
PS Claim 1; Page 15; 37pp; English.  
XX  
CC This invention relates to a series of nucleic acid oligomers for  
CC amplifying and detecting a nucleotide sequence of human immunodeficiency  
CC virus type 1 (HIV-1). The invention also comprises a labeled  
CC oligonucleotide that specifically hybridises to an HIV-1 sequence derived  
CC from gag or pol sequences, having one of the sequences fully defined in  
CC the specification, and a method for detecting HIV-1 in a biological  
CC sample, comprising mixing the sample with two or more of the  
CC amplification oligomers that specifically amplify at least one HIV-1  
CC target sequence within gag and a pol sequence which is a protease or  
CC reverse transcriptase sequence, amplifying the target, and detecting the  
CC amplified product. The oligonucleotides of the invention may be used to  
CC diagnose HIV-1 infection. The presents sequence represents a PCR primer  
CC used to amplify the HIV-1 Gag gene in the HIV detection method of the  
CC invention. (Updated on 29-AUG-2003 to standardise OS field)  
XX  
SQ Sequence 21 BP; 3 A; 5 C; 5 G; 8 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 88.2%; Pred. No. 4.5e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1729 ATTATCAGAGGTGACA 1745  
DB 18 ATTATCAGAGGAGGCCA 2  
RESULT 4832  
ABK65817  
ID ABK65817 standard; DNA; 21 BP.  
XX  
AC ABK65817;  
XX  
DT 02-JUL-2002 (first entry)  
XX  
DE Human single nucleotide polymorphism #437.  
XX  
KW Human; single nucleotide polymorphism; SNP; sickle cell anaemia;  
KW agammaglobulinaemia; diabetes insipidus; Lesch-Nyhan syndrome;  
KW muscular dystrophy; Wiskott-Aldrich syndrome; Fabry's disease;



PR 20-MAR-2001; 2001US-0277239P

The present invention relates to new isolated proteins (NOVX) and their coding sequences (ABV99327-ABV99595 and ABP70049-ABP70149), where X is any number from 1 to 48. The NOVX proteins and coding sequences are useful in the manufacture of a medicament for treating a syndrome



CC associated with a human disease, preferably a NOVX-associated disorder.  
CC The NOVX coding sequences and proteins are useful for treating,  
CC preventing or diagnosing diseases such as metabolic disorders, diabetes,  
CC obesity, infectious disease, anorexia, cancer-associated cachexia,  
CC cancer, neurodegenerative diseases, Alzheimer's disease, Parkinson's  
CC disease, immune disorders, hematopoietic disorders, cardiovascular  
CC disorders, fertility, bronchial asthma, AIDS, dyslipidemia, metabolic  
CC disturbances associated with obesity, metabolic syndrome X or wasting  
CC disorders associated with chronic diseases or various cancers. The NOVX  
CC coding sequences and proteins may also be used as targets for the  
CC identification of small molecules that modulate or inhibit e.g.  
CC neurogenesis, cell differentiation, cell proliferation, hematopoiesis,  
CC wound healing and angiogenesis, in gene therapy, in generation of  
CC antibodies that bind immunospecifically to NOVX substances for use in  
CC therapeutic or diagnostic methods. The present sequence is a PCR primer,  
CC which was used in an example from the invention  
XX

SQ Sequence 21 BP; 8 A; 5 C; 6 G; 2 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 88.2%; Pred. No. 4.5e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 789 CCTGTCAGAGGAGCTG 805  
Db 1 CCTGGCAGAGGAGCTG 17

RESULT 4836  
ABL44206/c  
ID ABL44206 standard; DNA; 21 BP.  
XX  
AC ABL44206;  
XX  
DT 11-APR-2002 (first entry)  
XX  
DE Human chromosome 1p36-35 PCR primer SEQ ID NO:1250.  
XX  
KW Human; chromosome 1p36-35; chromosome 21q22.1; genetic analysis; genome;  
KW PCR primer; ss.  
XX  
OS Homo sapiens.  
XX  
PN JP2001321190-A.  
XX  
PD 20-NOV-2001.  
XX  
PF 12-MAR-2001; 2001JP-00068285.  
XX  
PR 10-MAR-2000; 2000JP-00066716.  
XX  
PA (RIKA ) RIKAGAKU KENKYUSHO.  
PA (GENO-) GENOTEX YG.  
XX  
DR WPI; 2002-144136/19.  
XX

PT Arraying genome clones.  
XX  
PS Claim 4; Page 29; 528pp; Japanese.  
XX  
CC The present invention describes a method of arraying genome clones. The  
CC method comprises: (a) clones of the genomic libraries contained in  
CC multiwell plates numbered for discrimination are mixed in each of the  
CC multiwell plates; (b) a primer designed based on the chromosome marker  
CC sequence is added to the mixture to carry out an amplification reaction;  
CC (c) a signal corresponding to the marker is detected from the resultant  
CC amplified product to specify the discrimination Nos. of the multiwell  
CC plates containing the clones having said marker sequence; (d) the order  
CC of the markers is changed so that the same discrimination Nos. succeed to  
CC the maximum in the specified discrimination Nos. to array the multiwell  
CC plates; (e) the clones in the multiwell plates of the specified  
CC discrimination Nos. are mixed respectively in each wells of longitudinal  
CC and lateral directions; (f) the mixed clones are cultured and the

CC resultant cultures are amplified by using the above primer; (g) signals  
CC are detected from the amplified products; (h) the clones in the multiwell  
CC plates are specified from the detected result; and (i) the clones are  
CC reconstituted as the positions on the chromosome and arrayed. The  
CC microarray is useful for gene analysis. ABL42957 to ABL45322 represent  
CC PCR primers for human chromosome 1p36-35 DNA, and ABL45323 to ABL45634  
CC represent PCR primers for human chromosome 21q22.1, which are  
CC specifically claimed for use in the present invention  
XX

SQ Sequence 21 BP; 12 A; 2 C; 6 G; 1 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 88.2%; Pred. No. 4.5e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2160 TTCTCCTTTTCTTTT 2176  
Db 18 TTCCCCTTTTCTTTT 2

RESULT 4837  
ABK81198  
ID ABK81198 standard; DNA; 21 BP.  
XX  
AC ABK81198;  
XX

DT 13-AUG-2002 (first entry)  
XX

DE Polymunoglobulin receptor (pIGR) associated polynucleotide #1.  
XX  
KW Transcellular transport; transcytotic transport; paracellular transport;  
KW respiratory system disorder; lung cancer; tumour; asthma;  
KW pathogenic infection; allergy-related disorder;  
KW gastrointestinal tract disorder; gastrointestinal hormone disorder;  
KW Chron's disease; eating disorder; polyimmunoglobulin receptor; pIGR; ds.  
XX  
OS Unidentified.

XX WO200228408-A2.

XX 11-APR-2002.

PF 02-OCT-2001; 2001WO-US030832.

XX 02-OCT-2000; 2000US-0237929P.

PR 13-NOV-2000; 2000US-0248478P.

PR 14-NOV-2000; 2000US-0248819P.

PR 09-FEB-2001; 2001US-0267601P.

XX (ARIZ-) ARIZEKE PHARM INC.

XX Houston LL, Sheridan PJ, Hawley S, Glynn JM, Chapin S, Basu A;

XX WPI; 2002-416628/44.

XX Complex useful for transporting active agent through epithelial barrier,  
XX has biologically active portion and target element directed to ligand  
XX that confers e.g. transcytotic properties to agent specific to ligand.  
PS Disclosure; Page 88; 379pp; English.

XX The invention described a complex or compound (I) comprising a  
CC biologically active portion and a target element (II) directed to a  
CC ligand that confers transcellular, transcytotic or paracellular  
CC transporting properties to an agent specifically bound to the ligand,  
CC where (II) is not an antibody. Alternatively, (I) comprises two or more  
CC (II) directed to one or more ligands. (I) is useful for delivering a  
CC biologically active agent to an animal, for transporting an active agent  
CC through an epithelial or mucosal barrier, and for treating or identifying  
CC a disease in an animal e.g. diseases of the respiratory system including  
CC lung cancer and tumours, asthma, pathogenic infections, allergy-related  
CC disorders, gastrointestinal tract disorders, disorders relating to  
CC gastrointestinal hormones, Chron's disease, eating disorders and any



CC disease or disorder involving polyimmunoglobulin receptor (pIGR)  
CC displaying cells. This sequence represents a polynucleotide associated  
CC with the transport of biologically active agents across cellular barriers  
XX  
SQ Sequence 21 BP; 5 A; 9 C; 3 G; 4 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 88.2%; Pred. No. 4.5e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 588 ATGCTACCGCGCTCC 604  
Db 1 ATGCCTAAGCGCTCC 17  
RESULT 4838  
AAD22905/c  
ID AAD22905 standard; DNA; 21 BP.  
XX  
AC AAD22905;  
XX  
DT 26-FEB-2002 (first entry)  
XX  
DE Human soluble LIGHT DNA generating mutagenic forward PCR primer #1.  
XX  
KW Human; herpes virus entry-mediated; HVEM; p30; immunosuppressive; tumour;  
KW inflammatory disorder; herpes virus infection; lymphocyte proliferation;  
KW neuroprotective; dermatological; virucide; gene therapy; PCR primer; SLE;  
KW systemic lupus erythematosus; autoimmune disease; diabetes mellitus;  
KW rheumatoid arthritis; multiple sclerosis; myasthenia gravis; LIGHT; ss.  
XX  
OS Homo sapiens.  
XX  
FH Key Location/Qualifiers  
FT misc\_feature 17  
FT /\*tag= a  
FT /note= "Represented in the specification as X"  
XX  
PN WO200179496-A2.  
XX  
PD 25-OCT-2001.  
XX  
PF 11-APR-2001; 2001WO-US011857.  
XX  
PR 12-APR-2000; 2000US-00549096.  
XX  
PA (LJOL-) LA JOLLA INST ALLERGY & IMMUNOLOGY.  
XX  
PI Ware CF;  
XX  
DR WPI; 2002-026029/03.  
XX  
PS Novel polypeptide useful for inhibiting herpes virus production in cells,  
XX comprises isolated or recombinant homotrimeric p30 polypeptides which  
XX bind to lymphotoxin receptor and to herpes virus entry-mediated  
XX polypeptide (HVEM).  
XX  
PS Example 12; Page 59; 104pp; English.  
XX  
CC The invention relates to an isolated or recombinant homotrimeric p30  
CC polypeptide comprising a monomer polypeptide with a molecular weight of  
CC 30 kDa. p30 is found on the membrane protein and also functions as a  
CC cytokine. p30 is also called LIGHT because this is homologous to  
CC Lymphotoxins, exhibits inducible expression, and competes with HSV  
CC Glycoprotein D for HVEM, a receptor expressed T lymphocytes.p30 binds to  
CC lymphotoxin beta receptor or to herpes virus entry-mediated polypeptide  
CC (HVEM). p30 is useful for inhibiting virus production in cells and for  
CC modulating a lymphotoxin beta receptor (LTV SR)-mediated cellular  
CC response. p30 is useful for treating inflammatory disorders, tumours, for  
CC blocking the entry of herpes virus into cells, and to treat or prevent  
CC herpes virus infections such as beta herpes virus and cytomegalovirus.  
CC p30 is also useful for inhibiting p30-mediated cellular response e.g.,  
CC inhibition of a lymphocyte (a pathogenic effector cell) cellular response

CC such as lymphocyte proliferation. The inhibited lymphocyte response  
CC modulates a T or B lymphoma or an autoimmune disease such as rheumatoid  
CC arthritis, insulin dependent diabetes mellitus, multiple sclerosis,  
CC systemic lupus erythematosus (SLE) or myasthenia gravis. Also, the  
CC inhibited lymphocyte response modulates a reaction to a transplant. p30  
CC DNA is useful in gene therapy. The present sequence is a mutagenic PCR  
CC primer used for generating soluble LIGHT DNA also referred as p30  
XX  
SQ Sequence 21 BP; 2 A; 7 C; 7 G; 4 T; 0 U; 1 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 83.3%; Pred. No. 4.5e+03;  
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 464 CAGCAGGCGCTGGCCCGGC 481  
Db 20 CAGNAGGCCAGGCCAGC 3  
RESULT 4839  
ABX04726  
ID ABX04726 standard; DNA; 21 BP.  
XX  
AC ABX04726;  
XX  
DT 15-JAN-2003 (first entry)  
XX  
DE Human endogenous retrovirus k (herv-k) associated probe #90.  
XX  
KW Human; endogenous retrovirus; herv; prostate cancer; testicular cancer;  
KW multiple sclerosis; insulin-dependent diabetes mellitus; HML-2 protease;  
KW cancer; transgenic animal; probe; ss.  
XX  
OS Human endogenous retrovirus.  
XX  
PN WO200246477-A2.  
XX  
PD 13-JUN-2002.  
XX  
PF 07-DEC-2001; 2001WO-US047824.  
XX  
PR 07-DEC-2000; 2000US-0251830P.  
PR 07-DEC-2001; 2001US-00016604.  
XX  
PA (CHIR ) CHIRON CORP.  
XX  
PI Garcia P, Hardy SF, Williams LT, Escobedo J;  
XX  
DR WPI; 2002-691475/74.  
XX  
PT Novel isolated polypeptides useful for diagnosis of prostate cancer.  
XX  
PS Claim 18; Page 151; 152pp; English.  
XX  
CC The invention describes novel isolated polypeptides (I, Ib) useful for  
CC diagnosing prostate cancer comprising obtaining a patient sample  
CC containing prostate cells and detecting the presence or absence of an  
CC expression product of a HML-2 endogenous retrovirus in a patient sample.  
CC Polynucleotides associated with (I) are useful for diagnosis or treatment  
CC of testicular cancer, multiple sclerosis or insulin-dependent diabetes  
CC mellitus. An inhibitor of a HML-2 protease and a transdominant negative  
CC mutant of HML-2 CORF are also useful in the manufacture of a medicament  
CC for treating prostate cancer. (I) and (Ib) are useful for generating  
CC antibodies specific to the polypeptides associated with cancer, as  
CC targets for therapeutic intervention, and in immunising a transgenic  
CC animal. This sequence represents a probe used for detecting the presence  
CC of human endogenous retrovirus (herv) of the HML-2 sub-group in prostate  
CC tissue  
XX  
SQ Sequence 21 BP; 7 A; 4 C; 6 G; 4 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 88.2%; Pred. No. 4.5e+03;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 721 GTTGCTGCAGGATCAGA 737  
|||||  
Db 5 GTTCCTGCAGGATCAGA 21

RESULT 4840  
AAL45508/c  
ID AAL45508 standard; DNA; 21 BP.  
XX  
AC AAL45508;  
XX  
DT 29-AUG-2003 (revised)  
DT 06-JUN-2002 (first entry)  
XX  
DE HIV-1 gag amplification oligomer SEQ ID NO: 46.  
XX  
KW HIV-1; gag gene; pol gene; PCR; primer; drug resistance; genetic subtype;  
KW probe; ss.  
XX  
OS Human immunodeficiency virus 1.  
XX  
PN WO200220852-A1.  
XX  
PD 14-MAR-2002.  
XX  
PF 01-SEP-2000; 2000WO-US024117.  
XX  
PR 01-SEP-2000; 2000WO-US024117.  
XX  
PA (GENP-) GEN-PROBE INC.  
PA (INMR ) BIOMERIEUX SA.  
XX  
PI Yang YY, Brentano ST, Babola O, Tran N, Vernet G;  
XX WPI; 2002-292273/33.  
XX  
PT New nucleic acid oligomer, useful for detecting selected regions of gag  
PT and pol genes of human immune deficiency virus, particularly for  
PT assessing drug resistance.  
XX  
PS Claim 1; Page 62; 82pp; English.  
XX  
CC The present invention provides a number of nucleic acid oligomers which  
CC can be used to amplify the gag and pol genes of human immunodeficiency  
CC virus type I (HIV-1). These are used to detect regions of the gag and pol  
CC genes, especially regions associated with drug resistance, and also for  
CC identifying genetic subtypes of the virus. The present sequence is an  
CC oligomer of the invention. (Updated on 29-AUG-2003 to standardise OS  
CC field)  
XX  
SQ Sequence 21 BP; 3 A; 5 C; 5 G; 8 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 88.2%; Pred. No. 4.5e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1729 ATTATCAGAAGGTGACA 1745  
|||||  
Db 18 ATTATCAGAAGGAGGCCA 2

RESULT 4841  
AAL45473/c  
ID AAL45473 standard; DNA; 21 BP.  
XX  
AC AAL45473;  
XX  
DT 29-AUG-2003 (revised)  
DT 06-JUN-2002 (first entry)  
XX  
DE HIV-1 gag amplification oligomer SEQ ID NO: 11.

XX  
KW HIV-1; gag gene; pol gene; PCR; primer; drug resistance; genetic subtype;  
KW probe; ss.  
XX  
OS Human immunodeficiency virus 1.  
XX  
PN WO200220852-A1.  
XX  
PD 14-MAR-2002.  
XX  
PF 01-SEP-2000; 2000WO-US024117.  
XX  
PR 01-SEP-2000; 2000WO-US024117.  
XX  
PA (GENP-) GEN-PROBE INC.  
PA (INMR ) BIOMERIEUX SA.  
XX  
PI Yang YY, Brentano ST, Babola O, Tran N, Vernet G;  
XX WPI; 2002-292273/33.  
XX  
PT New nucleic acid oligomer, useful for detecting selected regions of gag  
PT and pol genes of human immune deficiency virus, particularly for  
PT assessing drug resistance.  
XX  
PS Claim 1; Page 40; 82pp; English.  
XX  
CC The present invention provides a number of nucleic acid oligomers which  
CC can be used to amplify the gag and pol genes of human immunodeficiency  
CC virus type I (HIV-1). These are used to detect regions of the gag and pol  
CC genes, especially regions associated with drug resistance, and also for  
CC identifying genetic subtypes of the virus. The present sequence is an  
CC oligomer of the invention. (Updated on 29-AUG-2003 to standardise OS  
CC field)  
XX  
SQ Sequence 21 BP; 3 A; 5 C; 5 G; 8 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 88.2%; Pred. No. 4.5e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1729 ATTATCAGAAGGTGACA 1745  
|||||  
Db 18 ATTATCAGAAGGAGGCCA 2

RESULT 4842  
ADE53231/c  
ID ADE53231 standard; DNA; 21 BP.  
XX  
AC ADE53231;  
XX  
DT 29-JAN-2004 (first entry)  
XX  
DE FEN-1 related DNA used within the scope of the invention, #367.  
XX  
KW Flap endonuclease-1; FEN-1; endonuclease; structure-specific nuclease;  
KW invasive cleavage structure; thermostable; DNA polymerase; 5' nuclease;  
KW viral infection; bacterial infection; cancer; forensic analysis;  
KW paternity determination; ds.  
XX  
OS Methanocaldococcus jannaschii.  
XX  
PN WO200270755-A2.  
XX  
PD 12-SEP-2002.  
XX  
PF 15-NOV-2001; 2001WO-US044953.  
XX  
PR 15-NOV-2000; 2000US-00713601.  
PR 17-NOV-2000; 2000US-00714935.  
XX  
PA (THIR-) THIRD WAVE TECHNOLOGIES INC.

XX Lyamichev VI, Kaiser MW, Lyamicheva N;  
PI WPI; 2002-750464/81.  
XX New composition useful for detecting and characterizing nucleic acid  
PT sequences and sequence variants for detecting the presence of viral or  
PT bacterial infections or cancer, comprises purified or chimerical FEN-1  
PT endonuclease.  
XX Example 65; SEQ ID NO 413; 871pp; English.  
PS The invention discloses a new composition (I) which comprises a purified  
XX flap endonuclease-1 (FEN-1) from e.g. Sulfolobus solfataricus,  
CC Pyrobaculum aerophilum or a chimerical FEN-1 endonuclease having a  
CC portion of the above endonuclease in addition to that of Pyrococcus  
CC horikoshii and Aeropyrum pernix. Also claimed is a composition comprising  
CC an isolated nucleic acid sequence encoding the endonuclease mentioned  
CC above, a composition comprising a vector having the nucleic acid sequence  
CC cited above, a composition comprising a host cell and vector cited above,  
CC a mixture comprising a first structure-specific nuclease selected from  
CC the species mentioned in composition (I), and a purified second structure  
CC -specific nuclease and detecting a target sequence, comprising: (a)  
CC providing a sample suspected of containing the target sequence,  
CC oligonucleotides capable of forming an invasive cleavage structure in the  
CC presence of the target sequence, and a FEN-1 endonuclease selected from  
CC the species cited above and (b) exposing the sample to the  
CC oligonucleotides and FEN-1 endonuclease. The second structure-specific  
CC nuclease also comprises a thermostable DNA polymerase. It has a 5'  
CC nuclease derived from a DNA polymerase altered in amino acid sequence  
CC such that it exhibits reduced DNA synthetic activity from that of the  
CC wild-type DNA polymerase but retains substantially the same 5' nuclease  
CC activity of the wild-type DNA polymerase. The second structure is  
CC selected from CLEAVASE BN enzyme, CLEAVASE DA enzyme, CLEAVASE DN enzyme,  
CC CLEAVASE DV enzyme, CLEAVASE BN/thrombin enzyme, CLEAVASE TthDN enzyme,  
CC T. aquaticus DNA polymerase, T. thermophilus DNA polymerase, E. coli Exo  
CC III and S. cerevisiae Rad1/Rad10 complex. The nucleic acid treatment kit  
CC comprises (I) and oligonucleotides capable of forming an invasive  
CC cleavage structure in the presence of a target nucleic acid. The  
CC oligonucleotides comprise: (a) a first oligonucleotide having a 5'  
CC portion complementary to a first portion of a target nucleic acid and (b)  
CC a second oligonucleotide comprising a 5' portion complementary to a  
CC second portion of the target nucleic acid downstream of and contiguous to  
CC the first portion and a 3' portion. The 3' portion of the second  
CC oligonucleotide comprises a single 3' terminal nucleotide not  
CC complementary to the target nucleic acid. Additionally, the kit has a  
CC third oligonucleotide complementary to a third portion of the target  
CC nucleic acid upstream of the first portion of the first target nucleic  
CC acid. In detecting a target sequence, the oligonucleotides and  
CC endonuclease are mixed under conditions where an invasive cleavage  
CC structure is formed between the target sequence and the oligonucleotides  
CC if the target sequence is present in the sample, where the invasive  
CC cleavage structure is cleaved by the endonuclease to form a cleavage  
CC product. The composition is useful in detecting and characterizing  
CC specific nucleic acid sequences and sequence variants which can be used  
CC in detecting the presence of viral or bacterial infections, and other  
CC diseases such as cancer. The composition may also be used in forensic  
CC analysis or for paternity determinations. The sequence presented is a FEN  
XX -1 related DNA used within the scope of the invention.

XX Sequence 21 BP; 11 A; 3 C; 4 G; 3 T; 0 U; 0 Other;  
SQ Query Match 0.5%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 88.2%; Pred. No. 4.5e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1768 AGCTTTTCTTTTGAA 1784  
DB 20 AGCTCTTCTTTTGAA 4  
RESULT 4843  
ABZ95191

ID ABZ95191 standard; DNA; 21 BP.  
XX AC ABZ95191;  
XX 17-OCT-2003 (first entry)  
XX Human eosinophil peroxidase antisense fragment no.1056.  
DE Human; antisense; lung dysfunction; nasal airway dysfunction;  
XX antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
XX Homo sapiens.  
OS WO200285308-A2.  
XX 31-OCT-2002.  
XX 23-APR-2002; 2002WO-US013135.  
XX 24-APR-2001; 2001US-0286137P.  
XX (EPIG-) EPIGENESIS PHARM INC.  
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX WPI; 2003-229219/22.  
XX Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX Disclosure; SEQ ID NO 10433; 872pp; English.  
PS The invention relates to a novel pharmaceutical composition, which has a  
XX first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX Sequence 21 BP; 0 A; 4 C; 7 G; 10 T; 0 U; 0 Other;  
SQ Query Match 0.5%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 88.2%; Pred. No. 4.5e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 2566 CTCGTCTTCTTGGCTTGG 2582  
DB 1 CTCGTCTTCTTGGCTTGG 17  
RESULT 4844  
ABQ83714







XX AC ACC70856;  
XX DT 20-NOV-2003 (first entry)  
XX DE Human G-protein coupled receptor 901 PCR primer #1.  
XX KW Human; anorectic; antidiabetic; antilipemic; hypothalamus;  
KW G-protein coupled receptor 901; obesity; diabetes; hyperlipaemia;  
XX KW cibophobia; anorexia nervosa; PCR; primer; ss.  
OS Homo sapiens.  
XX PN WO2003030936-A1.  
XX PD 17-APR-2003.  
XX PF 02-OCT-2002; 2002WO-JP010250.  
XX PR 02-OCT-2001; 2001JP-00306872.  
XX PA (SUMU ) SUMITOMO PHARM CO LTD.  
XX PI Suguru E, Tsuchida A, Yamanaka M, Taiji M;  
XX WPI; 2003-354886/33.  
XX PT Inhibitors of expression or activity of G-protein coupled receptor 901  
PT for treatment of lifestyle-related diseases and cibophobia.  
XX PS Example 5; Page 69; 91pp; Japanese.  
XX CC The present invention relates to novel remedies for the treatment of  
CC diseases containing as an active component an inhibitor of the expression  
CC or activity of hypothalamus-expressed G-protein coupled receptor 901 and  
CC for treatment of cibophobia containing as an active component a  
CC potentiator of the expression or activity of G-protein coupled receptor  
CC 901. The diseases which can be treated include obesity, diabetes and  
CC hyperlipaemia, and cibophobia (anorexia nervosa). The present PCR primer  
CC was used in an example from the invention  
XX SQ Sequence 21 BP; 2 A; 9 C; 7 G; 3 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 88.2%; Pred. No. 4.5e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 156 CGCCGGACGCCATGTTG 172  
Db 4 CGCCGGCCGCATGTGG 20  
RESULT 4847  
ACA90032  
ID ACA90032 standard; DNA; 21 BP.  
XX AC ACA90032;  
XX DT 10-JUL-2003 (first entry)  
XX DE Cardiovascular disease differential gene expression related primer #79.  
XX KW Cardiovascular disease; arteriosclerosis; ischaemia; angina pectoris;  
KW myocardial infarction; cardiant; antiarteriosclerotic; antianginal;  
KW gene therapy; differential gene expression; PCR; primer; ss.  
XX OS Homo sapiens.  
XX PN WO2003031650-A2.  
XX PD 17-APR-2003.  
XX PF 02-OCT-2002; 2002WO-EP011034.

XX PR 08-OCT-2001; 2001GB-00024145.  
XX PA (FARE ) BAYER AG.  
XX PI Munnes M, Gehrman M, Wick M, Schmitz G;  
XX WPI; 2003-403108/38.  
XX PT Predicting, diagnosing or prognosing a cardiovascular disease, e.g.  
PT angina, ischemia, myocardial infarction or arteriosclerosis by detection  
PT of a polynucleotide in a biological sample comprises detecting a  
PT hybridization complex.  
XX PS Example 3; Page 105; 454pp; English.  
XX CC The invention describes a method of predicting, diagnosing or prognosing  
CC a cardiovascular disease by detection of a polynucleotide in a biological  
CC sample comprises hybridising at least one of the polynucleotide to a  
CC nucleic acid material of a biological sample, thus forming a  
CC hybridisation complex, and detecting the hybridisation complex. The  
CC polynucleotides, polypeptides, antisense molecule, antibody and reagent  
CC are useful for preparing compositions for preventing, predicting or  
CC diagnosing, or a medicament for treating a cardiovascular disease, e.g.  
CC arteriosclerosis, ischaemia, angina pectoris, or myocardial infarction.  
CC This sequence represents a primer used to identify genes differentially  
CC regulated in individuals with cardiovascular disease  
XX SQ Sequence 21 BP; 5 A; 10 C; 1 G; 5 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 88.2%; Pred. No. 4.5e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 333 CGCCACCCCTACTTTCCC 349  
Db 4 CCCCACCTAGTTTCCC 20  
RESULT 4848  
ABZ23347/c  
ID ABZ23347 standard; DNA; 21 BP.  
XX AC ABZ23347;  
XX DT 07-APR-2003 (first entry)  
XX DE Forward PCR primer used to amplify GGTA1 coding region cDNA.  
XX KW Antigenic determinant; immunotolerance; cell therapy; liver condition;  
KW xenotransplantation; heart condition; pancreatic condition;  
KW kidney condition; lung condition; GGTA1; PCR; primer; ss.  
XX OS Sus sp.  
XX PN WO200292791-A1.  
XX PD 21-NOV-2002.  
XX PF 14-MAY-2002; 2002WO-US015307.  
XX PR 14-MAY-2001; 2001US-0291394P.  
PR 13-AUG-2001; 2001US-0312125P.  
PR 21-MAR-2002; 2002US-0367090P.  
XX PA (STEL-) STELL.  
XX PI Liljedahl M, Marcantonio D, Aspland SE;  
XX WPI; 2003-120679/11.  
XX PT Novel genetically engineered cell in which a gene comprising an antigenic  
PT determinant recognized by a recipient organism has been disrupted, useful

```
PT in cell therapy or xenotransplantation.
XX
PS Example 4E; Page 29; 97pp; English.
XX
CC The specification describes genetically engineered cell in which at least
CC one gene encoding a polypeptide comprising an antigenic determinant which
CC is recognized by a desired recipient organism or at least one gene which
CC encodes a protein associated with the synthesis of a molecule comprising
CC the antigenic determinant has been disrupted. The genetically engineered
CC cell has a reduced level of immunogenicity in the recipient and can be
CC safely transplanted across species. It reduces the amount of medication
CC required to induce a state of immunotolerance in the host. The genetically
CC engineered cells of the invention are useful in cell therapy, or to
CC produce tissues or organs for use in xenotransplantation. They are useful
CC for treating heart conditions (e.g., valvular heart disease), liver
CC conditions (e.g., liver cirrhosis), pancreatic conditions (e.g.,
CC diabetes), kidney conditions (e.g., primary glomerulonephritis), lung
CC conditions (e.g., cystic fibrosis), Alzheimer's disease, stroke,
CC Parkinson's disease, cataracts and Creutzfeldt-Jacob disease. PCR primers
CC ABZ23347-48 were used to amplify the coding region of porcine GGTAL, from
CC a cDNA library constructed into pCDNA3.1. The amplified sequence was
CC identified as an antigenic determinant
XX
SQ Sequence 21 BP; 11 A; 1 C; 5 G; 4 T; 0 U; 0 Other;
Query Match 0.5%; Score 13.8; DB 1; Length 21;
Best Local Similarity 88.2%; Pred. No. 4.5e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 2150 ATTGATTTTTCCTCCT 2166
Db |||||
21 ATTCATTATTTTCCTCCT 5
RESULT 4849
ADA26144
ID ADA26144 standard; RNA; 21 BP.
XX
AC ADA26144;
XX
DT 20-NOV-2003 (first entry)
XX
DE Human REL-A short interfering nucleic acid SEQ ID NO:279.
XX
KW short interfering nucleic acid; siNA; nuclear factor kappa B; NF-kappaB;
KW RNA interference; vasotropic; neurotropic; antiparkinsonian;
KW neuroprotective; cytostatic; antiinflammatory; antiallergic; virucide;
KW anti-HIV; immunosuppressive; anticonvulsant; nephrotropic; gene therapy;
KW modulation; inhibition; restenosis; central nervous system lesion;
KW Alzheimer's disease; Parkinson's disease; Huntington's disease; epilepsy;
KW dementia; amyotrophic lateral sclerosis; cancer;
KW polycystic kidney disease; inflammatory disease; allergic disease;
KW viral infection; HIV; autoimmune disease; transplant rejection; ribozyme;
KW human; v-rel reticuloendotheliosis viral oncogene homologue A; REL-A;
KW nuclear factor; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO2003070970-A2.
XX
PD 28-AUG-2003.
XX
PF 20-FEB-2003; 2003WO-US004951.
XX
PR 20-FEB-2002; 2002US-0358580P.
PR 11-MAR-2002; 2002US-0363124P.
PR 06-JUN-2002; 2002US-0386782P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 15-JAN-2003; 2003US-0440129P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Mcswiggen J, Beigelman L;
XX
DR WPI; 2003-689788/65.
XX
PT New short interfering nucleic acid downregulates expression of the NF-
PT kappaB gene useful e.g. for treatment and diagnosis of cancer and
PT inflammation.
XX
PS Example 3; Page 131; 149pp; English.
XX
CC The present invention describes a short interfering nucleic acid (siNA)
CC that downregulates expression of a nuclear factor kappa B (NF-kappaB)
CC gene by RNA interference. Also described: (1) kits for in vitro or in
CC vivo delivery of siNA; (2) conjugates and/or complexes of siNA; and (3)
CC vectors that express siNA. The siNAs have vasotropic, neurotropic,
CC antiparkinsonian, neuroprotective, cytostatic, antiinflammatory,
CC antiallergic, virucide, anti-HIV, immunosuppressive, anticonvulsant and
CC nephrotropic activities, and can be used in gene therapy, and for the
CC modulation (inhibition) of expression or activity of NF-kappaB by RNA
CC interference (siNA target mRNA, RNA splice variants, post-
CC transcriptionally modified RNA, pre-RNA and/or RNA templates). The siNA
CC sequences can be used to modulate expression of NF-kappaB genes, in
CC cells, tissue explants or organisms, e.g. by ex vivo gene therapy, in
CC grafts and transplants for treating restenosis and central nervous system
CC lesions and injuries (Alzheimer's, Parkinson's or Huntington's diseases,
CC epilepsy, dementia or amyotrophic lateral sclerosis) or for treating many
CC cancers, other proliferative diseases (restenosis and polycystic kidney
CC disease), inflammatory and/or allergic diseases, viral infections
CC (including HIV), autoimmune diseases and transplant rejection, and also
CC for drug screening; diagnosis; target identification and validation;
CC genetic engineering; pharmacogenomics; studying gene function and gene
CC mapping (e.g. of single-nucleotide polymorphisms). The present sequence
CC represents human v-rel reticuloendotheliosis viral oncogene homologue A
CC (REL-A) synthetic modified siNA construct, which is used in the
CC exemplification of the present invention. REL-A is a nuclear factor of
CC the kappa light polypeptide gene enhancer in B-cells.
XX
SQ Sequence 21 BP; 7 A; 2 C; 7 G; 2 T; 3 U; 0 Other;
Query Match 0.5%; Score 13.8; DB 1; Length 21;
Best Local Similarity 82.4%; Pred. No. 4.5e+03;
Matches 14; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
QY 689 GACGAGGTGCAGAAATGT 705
Db |||||
4 GACAAGGUGCAGAAAGT 20
RESULT 4850
ACC78817/c
ID ACC78817 standard; DNA; 21 BP.
XX
AC ACC78817;
XX
DT 02-SEP-2003 (first entry)
XX
DE Human CD31 (PECAM) amplifying antisense primer.
XX
KW Pluripotent; c-kit; antiparkinsonian; vulnerrary; cytostatic; fetal cell;
KW gene therapy; human; CD31; PECAM; PCR; primer; ss.
XX
OS Homo sapiens.
XX
PN WO2003042405-A2.
XX
PD 22-MAY-2003.
XX
PF 15-NOV-2002; 2002WO-US036966.
XX
PR 15-NOV-2001; 2001US-0335878P.
PR 13-FEB-2002; 2002US-0356295P.
```

XX (CHIL-) CHILDRENS MEDICAL CENT.  
PA Atala A, De Coppi P;  
XX WPI; 2003-493308/46.  
XX Producing a population of cells enriched for pluripotent fetal stem  
PT cells, useful for enzyme replacement and gene therapy, comprises  
PT selecting c-kit positive cells from chorionic villus, amniotic fluid or  
PT placenta sample.  
XX Example; Page 32; 57pp; English.  
XX The invention relates to producing a population of cells enriched for  
CC pluripotent fetal stem cells and involves selecting c-kit positive cells  
CC from chorionic villus, amniotic fluid or placenta sample. The methods are  
CC useful for isolating, expanding and differentiating pluripotent fetal  
CC stem cells derived from chorionic villus, amniotic fluid or placenta. The  
CC pluripotent c-kit positive human fetal stem cells are useful for bone  
CC marrow transplantation, autologous/heterologous enzyme replacement  
CC therapy, autologous/heterologous transgene carriers in gene therapy,  
CC autologous/heterologous tissue regeneration and replacement therapy, e.g.  
CC burn and wound dressings, reconstructive treatment by surgical  
CC implantation, tissue engineering, or for treating a disease in a human,  
CC e.g. Parkinson's disease or cancer. Sequences AC78816-17 represent PCR  
CC primers for human CD31 (PECAM)  
XX Sequence 21 BP; 8 A; 4 C; 5 G; 4 T; 0 U; 0 Other;  
SQ Query Match 0.5%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 88.2%; Pred. NO. 4.5e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
Qy 1110 GGGACTTTGCCTATGTC 1126  
Db 17 GGAACCTTGCCTATTC 1  
RESULT 4851  
ADC39012  
ID ADC39012 standard; DNA; 21 BP.  
XX ADC39012;  
AC ADC39012;  
XX 18-DEC-2003 (first entry)  
XX Human ELAM-1 targeted primer #11.  
DE ss; primer; immunosuppressive; antisense therapy;  
XX corneal allograft rejection; intercellular adhesion molecule-1; ICAM-1;  
KW extracellular adhesion molecule-1; ELAM-1;  
KW vascular cell adhesion molecule-1; VCAM-1; corneal explant.  
XX Synthetic.  
OS Homo sapiens.  
XX Key Location/Qualifiers  
FT misc\_difference 1. .21  
FT /\*tag= a  
FT /note= "all internucleotide linkages are phosphodiester  
FT bonds"  
XX WO2003032920-A2.  
PN 24-APR-2003.  
XX 16-OCT-2002; 2002WO-US033236.  
PF 18-OCT-2001; 2001US-00982262.  
XX (ISIS-) ISIS PHARM INC.  
XX

PI Bennett CF, Mirabelli CK;  
XX WPI; 2003-403142/38.  
XX Inhibiting corneal allograft rejection, by contacting an allograft with a  
PT formulation having an oligonucleotide targeted to intercellular adhesion  
PT molecule-1, extracellular adhesion molecule-1 or vascular cell adhesion  
PT molecule-1.  
XX Example 12; SEQ ID NO 38; 106pp; English.  
PS The invention relates to a method of inhibiting corneal allograft  
XX rejection, by contacting the allograft with a topical formulation  
CC comprising an antisense oligonucleotide targeted to intercellular  
CC adhesion molecule-1 (ICAM-1), extracellular adhesion molecule-1 (ELAM-1)  
CC or vascular cell adhesion molecule-1 (VCAM-1). The oligonucleotide is  
CC useful for inhibiting corneal allograft rejection or for preserving a  
CC corneal explant ex vivo, where the explant is human. This sequence  
CC corresponds to one of the oligonucleotide of the invention.  
XX Sequence 21 BP; 8 A; 3 C; 6 G; 4 T; 0 U; 0 Other;  
SQ Query Match 0.5%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 88.2%; Pred. NO. 4.5e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
Qy 2489 TCATGGGGTAACTCTATA 2505  
Db 5 TCAGGGGGTAACTCTACA 21  
RESULT 4852  
ADD14396/c  
ID ADD14396 standard; DNA; 21 BP.  
XX ADD14396;  
AC ADD14396;  
XX 01-JAN-2004 (first entry)  
DT Human src biomarker forward PCR primer SEQ ID NO:585.  
DE predictor set; protein tyrosine kinase activity modulator;  
XX protein tyrosine kinase pathway; protein tyrosine kinase; cytostatic;  
KW gene therapy; drug sensitivity; genetic profile; cancer; human;  
KW PCR primer; ss.  
XX Synthetic.  
OS Homo sapiens.  
XX WO2003062395-A2.  
PN 31-JUL-2003.  
XX 17-JAN-2003; 2003WO-US001981.  
PF 18-JAN-2002; 2002US-0350061P.  
XX (BRIM ) BRISTOL-MYERS SQUIBB CO.  
XX Huang F, Fairchild CR, Lee FY, Shaw P;  
PI WPI; 2003-636735/60.  
XX New polynucleotides and polypeptides for predicting the activity of  
PT compounds that interact with protein tyrosine kinases and/or protein  
PT tyrosine kinase pathways.  
XX Example 2; SEQ ID NO 585; 139pp; English.  
PS The present invention describes a predictor set comprising a plurality of  
XX polynucleotides or polypeptides whose expression pattern is predictive of  
CC the response of cells to treatment with a compound that modulates protein  
CC tyrosine kinase activity or members of the protein tyrosine kinase

CC pathway. Also described: (1) predicting whether a compound is capable of  
CC modulating the activity of cells, comprising obtaining a sample of cells,  
CC determining whether the cells express a plurality of markers, and  
CC correlating the expression of the markers to the compound's ability to  
CC modulate the activity of the cells; (2) a plurality of cell lines for  
CC identifying polynucleotides and polypeptides whose expression levels  
CC correlate with compound sensitivity or resistance of cells associated  
CC with a disease state; and (3) identifying polynucleotides and  
CC polypeptides that predict compound sensitivity or resistance of cells  
CC associated with a disease state, comprising subjecting the plurality of  
CC cell lines to one or more compounds, analysing the expression pattern of  
CC a microarray of polynucleotides or polypeptides, and selecting  
CC polynucleotides or polypeptides that predict the sensitivity or  
CC resistance of cells associated with a disease state by using the  
CC expression pattern of the microarray. The polynucleotides and  
CC polypeptides have cytostatic activities, and can be used in gene therapy.  
CC The polynucleotides and polypeptides are useful in predicting the  
CC activity of compounds that interact with protein tyrosine kinases and/or  
CC protein tyrosine kinase pathways. These may be used in determining drug  
CC sensitivity in patients to allow the development of individualized  
CC genetic profiles which aid in treating diseases and disorders (e.g.  
CC cancer) based on patient response at a molecular level. The present  
CC sequence is used in the exemplification of the present invention.

SQ Sequence 21 BP; 2 A; 6 C; 4 G; 9 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 88.2%; Pred. No. 4.5e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 758 ATTTCCATGACCAAGAA 774  
Db | | | | | | | | | | | | | | | | | | | |  
17 AGTCCAAGACCAAGAA 1

RESULT 4853  
ADD24723/c  
ID ADD24723 standard; DNA; 21 BP.

XX AC ADD24723;  
XX DT 15-JAN-2004 (first entry)

XX DE Human CYP2E1 mutant T7632A probe H210.  
XX KW diagnostic; pharmaceutical tolerance; side effect; drug; human;  
XX KW allelic variability; polymorphism; phase I; phase II;  
XX KW detoxification mechanism; PCR; primer; probe; NAT2; CYP2D6; CYP1A2;  
XX CYP3A4; MEH; TPMT; MTHFR; paraoxonase; CYP2C9; CYP2C19; CYP2E1; DPD; ss.

OS Homo sapiens.

XX WO2003018837-A2.

XX PD 06-MAR-2003.

XX PF 22-AUG-2002; 2002WO-EP009386.

XX XX 24-AUG-2001; 2001DE-01040651.

XX PR 30-APR-2002; 2002DE-01019373.

XX XX (ADNA-) ADNAGEN AG.

XX PI Waschuetza S, Schnakenberg E, Lustig M;

XX XX WPI; 2003-290079/28.

XX PT Diagnostic kit, useful for assessing a subject's tolerance of drugs,  
XX PT comprises reagents for determining alleles of genes encoding  
XX PT detoxification enzymes.  
XX PS Claim 6; Page 80; 156pp; German.

XX XX

CC This invention describes a novel diagnostic kit for determining tolerance  
CC of pharmaceuticals in humans by determining allelic variability of at  
CC least two polymorphisms of a human enzyme involved in phase I and/or II  
CC of the detoxification mechanism in a blood, tissue or other human sample,  
CC where tolerance is determined from presence or absence of alleles. The  
CC kit comprises two pairs of oligonucleotide primers, in which each pair  
CC amplifies, by PCR, part of a gene for a human detoxification mechanism-  
CC associated enzyme. The kit may also contain two further pairs of  
CC oligonucleotides, serving as probes for detection of amplified DNA  
CC segments, especially where the probes are complementary to a single  
CC strand of one allele of the target gene. The probes are labelled with  
CC fluorophores (LC-Red640 or LC-Red705 for 5'-labelling or fluorescein for  
CC 3'-labelling) which generate a different signal in the hybridized and non  
CC -hybridized condition. The enzymes detected include NAT2, CYP2D6, CYP1A2,  
CC CYP3A4, MEH, TPMT, MTHFR, paraoxonase, CYP2C9, CYP2C19, CYP2E1 or DPD.  
CC The kit is used to determine an individual's tolerance of a particular  
CC drug, to establish a suitable dose and/or to predict if a subject will  
CC show side-effects to a drug. The kit provides minimally invasive, safe  
CC and reliable determination of the metabolic capacity of phase I and/or II  
CC enzymes at the molecular level. This sequence represents a probe used in  
CC the kit of the invention.

SQ Sequence 21 BP; 14 A; 1 C; 1 G; 5 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.8; DB 1; Length 21;  
Best Local Similarity 88.2%; Pred. No. 4.5e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2172 TTTT TTTT TTTT TTTT TTTT AA 2188  
Db | | | | | | | | | | | | | | | | | | | |  
21 TTTT TTTT AA TTTT TTTT AA 5

RESULT 4854  
ADE34494/c  
ID ADE34494 standard; DNA; 21 BP.

XX AC ADE34494;  
XX DT 29-JAN-2004 (first entry)

XX DE Human G-protein coupled receptor related primer #SEQ ID 114.  
XX KW Cytostatic; antiinflammatory; hepatotropic; nephrotropic; dermatological;  
XX KW antiarthritic; antiasthmatic; antidiabetic; hypotensive; antiulcer;  
XX KW antilipemic; antiarteriosclerotic; nootropic; neuroprotective; anorectic;  
XX KW immunomodulator; uropathic; antiinfertility; G-protein coupled receptor;  
XX GPCR; GPCR185; GPCR186; GPCR187; GPCR188; GPCR189; GPCR222; GPCR223;  
XX hepatitis; nephritis; dermatitis; pancreatitis; rheumatoid arthritis;  
XX osteoarthritis; atopic dermatitis; asthma; diabetes; hypertension;  
XX inflammatory bowel disease; gastric ulcer; arteriosclerosis;  
XX hyperlipemia; Alzheimer's disease; dementia; obesity; pulmonary fibrosis;  
XX renal fibrosis; immune deficiency; infertility; urinary blockage; cancer;  
XX PCR; primer; ss.

XX OS Homo sapiens.

XX XX WO2003078632-A1.

XX PN 25-SEP-2003.

XX PD 14-MAR-2003; 2003WO-JP003050.

XX XX 15-MAR-2002; 2002JP-00071567.

XX PR 14-MAY-2002; 2002JP-00138013.

XX PR 28-FEB-2003; 2003JP-00054663.

XX XX (NISB ) JAPAN TOBACCO INC.

XX PI Watanabe H, Nozaki Y;

XX XX WPI; 2003-722435/68.

XX DR

XX XX





XX	
PF	20-APR-2000; 2000WO-EP003636.
XX	
PR	26-APR-1999; 99EP-00303215.
XX	
PA	(AMSH ) AMERSHAM PHARMACIA BIOTECH AB.
XX	
PI	Ulfendahl P, Wong K;
XX	
DR	WPI; 2000-679677/66.
XX	
PT	Identifying extendible primers for use in identification, or
PT	classification of a nucleic acid of an organism, allele or gene such as
PT	class 1/2 HLA comprises identifying all possible nucleotide sequences of
PT	specific length.
XX	
PS	Claim 14; Page 46; 66pp; English.
XX	
CC	The present invention provides a method for identifying a set of
CC	extendible primers which can be used in the identification, typing and
CC	classification of genes. This can then be used to predict protein and
CC	sequence and structure, in organ donation to match the organ with the
CC	receiver, and to identify bacteria in a sample. The method can be used to
CC	type the human leukocyte antigen genes (HLA) and 16s rRNA genes in
CC	particular
XX	
SQ	Sequence 25 BP; 3 A; 3 C; 3 G; 16 T; 0 U; 0 Other;
	Query Match            0.5%;   Score 13.8;   DB 1;   Length 25;
	Best Local Similarity   88.2%;   Pred. No. 5.1e+03;
	Matches   15;   Conservative   0;   Mismatches   2;   Indels   0;   Gaps   0
QY	2781 AATTGAAAAAA AAAA 2797
Db	17 AAGTTAAAAAA AAAA 1
	RESULT 4859
AAC96394/c	
ID	AAC96394 standard; DNA; 25 BP.
XX	
AC	AAC96394;
XX	
DT	26-FEB-2001 (first entry)
XX	
DE	HLA DPB1 gene PCR primer #126.
XX	
KW	DNA sequence analysis; sequencing; protein sequence; protein structure;
KW	gene typing; organ donation; bacteria identification; 16s rRNA; HLA;
KW	human leukocyte antigen; PCR primer; ss.
XX	
OS	Homo sapiens.
XX	
PN	WO200065088-A2.
XX	
PD	02-NOV-2000.
XX	
PF	20-APR-2000; 2000WO-EP003636.
XX	
PR	26-APR-1999; 99EP-00303215.
XX	
PA	(AMSH ) AMERSHAM PHARMACIA BIOTECH AB.
XX	
PI	Ulfendahl P, Wong K;
XX	
DR	WPI; 2000-679677/66.
XX	
PT	Identifying extendible primers for use in identification, or
PT	classification of a nucleic acid of an organism, allele or gene such as
PT	class 1/2 HLA comprises identifying all possible nucleotide sequences of
PT	specific length.
XX	
PS	Claim 14; Page 50; 66pp; English.

XX The present invention provides a method for identifying a set of  
CC extendible primers which can be used in the identification, typing and  
CC classification of genes. This can then be used to predict protein the  
CC sequence and structure, in organ donation to match the organ with the  
CC receiver, and to identify bacteria in a sample. The method can be used to  
CC type the human leukocyte antigen genes (HLA) and 16s rRNA genes in  
CC particular  
XX  
SQ Sequence 25 BP; 4 A; 3 C; 4 G; 14 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 25;  
Best Local Similarity 88.2%; Pred. No. 5.1e+03;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 1974 CCTGAAAAAAGAAAA 1990  
Db 17 CCTTCAAAAAA 1  
  
RESULT 4860  
AAC96041/c  
ID AAC96041 standard; DNA; 25 BP.  
XX  
AC AAC96041;  
XX  
DT 26-FEB-2001 (first entry)  
DE 16s rRNA gene PCR primer #8.  
XX  
KW DNA sequence analysis; sequencing; protein sequence; protein structure;  
KW gene typing; organ donation; bacteria identification; 16s rRNA; HLA;  
KW human leukocyte antigen; PCR primer; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO200065088-A2.  
XX  
PD 02-NOV-2000.  
XX  
PF 20-APR-2000; 2000WO-EP003636.  
XX  
PR 26-APR-1999; 99EP-00303215.  
XX  
PA (AMSH ) AMERSHAM PHARMACIA BIOTECH AB.  
XX  
PI Ulfendahl P, Wong K;  
XX  
DR WPI; 2000-679677/66.  
XX  
PT Identifying extendible primers for use in identification, or  
PT classification of a nucleic acid of an organism, allele or gene such as  
PT class 1/2 HLA comprises identifying all possible nucleotide sequences of  
PT specific length.  
XX  
PS Claim 14; Page 44; 66pp; English.  
XX  
CC The present invention provides a method for identifying a set of  
CC extendible primers which can be used in the identification, typing and  
CC classification of genes. This can then be used to predict protein  
CC sequence and structure, in organ donation to match the organ with the  
CC receiver, and to identify bacteria in a sample. The method can be used to  
CC type the human leukocyte antigen genes (HLA) and 16s rRNA genes in  
CC particular  
XX  
SQ Sequence 25 BP; 2 A; 6 C; 1 G; 16 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.8; DB 1; Length 25;  
Best Local Similarity 72.0%; Pred. No. 5.1e+03;  
Matches 18; Conservative 0; Mismatches 7; Indels 0; Gaps 0;  
  
QY 2779 AGAATTGAAAAA 2803  
Db 17 CCTTCAAAAAA 1

Db 25 ACAATGGGGTAAAAA 1  
  
RESULT 4861  
AAD41903/c  
ID AAD41903 standard; RNA; 28 BP.  
XX  
AC AAD41903;  
XX  
DT 30-OCT-2002 (first entry)  
XX  
DE ON-41 oligonucleotide used in the exemplification of the invention.  
XX Antisense therapy; infection; cardiovascular disorder; immune reaction;  
KW gene therapy; virucide; cytostatic; antibacterial; antiinflammatory;  
KW cancer; cardiant; ss.  
XX  
OS Unidentified.  
XX  
FH Key Location/Qualifiers  
FT modified\_base 1 /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "5-(1-propynyl)-2'-deoxyuridine; This base is  
FT given as N in the sequence shown as SEQ ID NO: 50 in the  
FT sequence listing"  
FT modified\_base 2 /\*tag= b  
FT /mod\_base= OTHER  
FT /note= "5-methyl-2'-deoxycytidine; This base is given as  
FT N in the sequence shown as SEQ ID NO: 50 in the sequence  
FT listing"  
FT modified\_base 3 /\*tag= c  
FT /mod\_base= OTHER  
FT /note= "5-(1-propynyl)-2'-deoxyuridine; This base is  
FT given as N in the sequence shown as SEQ ID NO: 50 in the  
FT sequence listing"  
FT modified\_base 4 /\*tag= d  
FT /mod\_base= OTHER  
FT /note= "5-methyl-2'-deoxycytidine; This base is given as  
FT N in the sequence shown as SEQ ID NO: 50 in the sequence  
FT listing"  
FT modified\_base 5 /\*tag= e  
FT /mod\_base= OTHER  
FT /note= "5-(1-propynyl)-2'-deoxyuridine; This base is  
FT given as N in the sequence shown as SEQ ID NO: 50 in the  
FT sequence listing"  
FT modified\_base 11 /\*tag= f  
FT /mod\_base= OTHER  
FT /note= "5-methyl-2'-deoxycytidine; This base is given as  
FT N in the sequence shown as SEQ ID NO: 50 in the sequence  
FT listing"  
FT modified\_base 12 /\*tag= g  
FT /mod\_base= OTHER  
FT /note= "5-(1-propynyl)-2'-deoxyuridine; This base is  
FT given as N in the sequence shown as SEQ ID NO: 50 in the  
FT sequence listing"  
FT modified\_base 14 /\*tag= h  
FT /mod\_base= OTHER  
FT /note= "5-methyl-2'-deoxycytidine; This base is given as  
FT N in the sequence shown as SEQ ID NO: 50 in the sequence  
FT listing"  
FT modified\_base 15 /\*tag= i  
FT /mod\_base= OTHER  
FT /note= "5-(1-propynyl)-2'-deoxyuridine; This base is  
FT given as N in the sequence shown as SEQ ID NO: 50 in the





XX SQ Sequence 15 BP; 1 A; 0 C; 0 G; 13 T; 0 U; 1 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 15;  
Best Local Similarity 92.9%; Pred. No. 2.7e+03;  
Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;  
QY 2786 AAAAAAAAAAAAAA 2799  
Db :||||| 1  
14 WAAAAAAAAAAAAA 1  
RESULT 4863  
ABL01248  
ID ABL01248 standard; DNA; 15 BP.  
XX AC ABL01248;  
XX DT 12-MAR-2002 (first entry)  
XX DE Human MMP3 gene polymorphism detection ASO primer SEQ ID NO:27.  
XX KW Human; matrix metalloproteinase 3; MMP3; chromosome 11q22.3; SNP;  
KW haplotype; polymorphism; polymorphic; single nucleotide polymorphism;  
KW probe; primer; detection; genotyping; vulnery; cytostatic; cancer;  
KW antiarteriosclerotic; gene therapy; coronary atherosclerosis;  
KW wound healing; ss.  
XX OS Homo sapiens.  
XX WO200179238-A2.  
XX PD 25-OCT-2001.  
XX PF 17-APR-2001; 2001WO-US012452.  
XX PR 17-APR-2000; 2000US-0197911P.  
XX PR 13-JUL-2000; 2000US-0218092P.  
XX PA (GENA-) GENAISSANCE PHARM INC.  
XX PI Bentivegna SC, Chew A, Choi JY, Koshy B, Stephens JC;  
XX WPI; 2002-075067/10.  
XX PS Claim 15; Page 14; 83pp; English.  
XX The present invention describes a method for genotyping a human matrix  
CC metalloproteinase 3 (MMP3) gene of an individual. MMP3 has vulnerary,  
CC cytostatic and antiarteriosclerotic activity, and can be used in gene  
CC therapy. The method can be used: for improving the efficacy and  
CC reliability of several steps in the discovery and development of drugs  
CC for treating diseases associated with MMP3 activity, e.g., wound healing,  
CC cancer and coronary atherosclerosis; to validate MMP3 as a candidate  
CC agent for treating a specific condition or disease predicted to be  
CC associated with MMP3 activity; and in the design of clinical trials of  
CC candidate drugs for treating a specific condition or disease predicted to  
CC be associated with MMP3 activity. Polymorphic variants of a reference  
CC sequence for MMP3 (see ABL01223) are useful in studying the expression  
CC and function of MMP3, and in expressing MMP3 protein for use in screening  
CC for candidate drugs to treat diseases related to MMP3 activity. ABL01225  
CC to ABL01246 and ABL01247 to ABL01290 represent allele-specific  
CC oligonucleotide (ASO) probes and primers used in the detection of  
CC polymorphisms in the human MMP3 gene. ABL01291 to ABL01334 represent  
CC preferred primers used in the detection of polymorphisms in the human  
XX MMP3 gene.  
XX SQ Sequence 15 BP; 7 A; 0 C; 1 G; 6 T; 0 U; 1 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 15;  
Best Local Similarity 92.9%; Pred. No. 2.7e+03;  
Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;  
QY 2358 TATTTTAAGAAACA 2371  
Db :||||| 1  
2 TATTTTAAGAAASA 15  
RESULT 4864  
ABK32799  
ID ABK32799 standard; DNA; 15 BP.  
XX AC ABK32799;  
XX DT 23-APR-2002 (first entry)  
XX DE Human APPBP1 gene, allele-specific oligonucleotide #29.  
XX KW Human; amyloid beta precursor protein binding protein 1; APPBP1; probe;  
KW Alzheimer's disease; transgenic animal; platelet aggregation;  
KW single nucleotide polymorphism; SNP; allele-specific oligonucleotide; ss.  
XX OS Homo sapiens.  
XX WO200202820-A1.  
XX PD 10-JAN-2002.  
XX PF 02-JUL-2001; 2001WO-US020951.  
XX PR 30-JUN-2000; 2000US-0215511P.  
XX PA (GENA-) GENAISSANCE PHARM INC.  
XX PI Anastasio AE, Chew A, Choi JY, Kazemi A, Koshy B, Sausker EA;  
XX PI Stephens CJ;  
XX WPI; 2002-164539/21.  
XX The amyloid beta precursor protein binding protein 159 kD (APPBP1) gene  
PT polymorphic variants, useful e.g. in studying the expression and function  
PT of APPBP1 and screening candidate drugs for treating Alzheimer's disease.  
XX Claim 17; Page 13; 104pp; English.  
XX The invention relates to an isolated polypeptide comprising a sequence  
CC which is a polymorphic variant of a reference sequence for the amyloid  
CC beta precursor protein binding protein 1, 59kD (APPBP1) protein or its  
CC fragment. The polymorphic variants are useful in studying the expression  
CC and function of APPBP1, in expressing APPBP1 protein for use in screening  
CC for candidate drugs to treat diseases related to APPBP1 activity, in  
CC studying the effect of the variation on the biological activity of  
CC APPBP1, and the binding affinity of candidate drugs targeting APPBP1 for  
CC the treatment of disorders such as Alzheimer's disease. The haplotyping  
CC methods are useful in validating APPBP1 as a candidate target for  
CC treating a specific condition or disease predicted to be associated with  
CC APPBP1 activity, or in the design of clinical trials of candidate drugs  
CC for treating a specific condition or disease associated with APPBP1  
CC activity. The transgenic animals are useful for studying expression of  
CC the APPBP1 isogenes in vivo, for in vivo screening and testing of drugs  
CC targeted against APPBP1 protein, and for testing the efficacy of  
CC therapeutic agents and compounds for disorders related to platelet  
CC aggregation in a biological system. ABK32771-ABK32327 represent human  
CC APPBP1 gene allele-specific oligonucleotides used in the method of the  
XX invention  
XX SQ Sequence 15 BP; 13 A; 1 C; 0 G; 0 T; 0 U; 1 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 15;  
Best Local Similarity 92.9%; Pred. No. 2.7e+03;  
Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

```
QY      2786 AAAAAAAAAAAAAA 2799
Db      |||||
        2 AAAAAAAAAAAAAARA 15

RESULT 4865
ABK32799/C
ID      ABK32799 standard; DNA; 15 BP.
XX
AC      ABK32799;
XX
DT      23-APR-2002 (first entry)
XX
DE      Human APPBP1 gene, allele-specific oligonucleotide #29.
XX
KW      Human; amyloid beta precursor protein binding protein 1; APPBP1; probe;
KW      Alzheimer's disease; transgenic animal; platelet aggregation;
KW      single nucleotide polymorphism; SNP; allele-specific oligonucleotide; ss.
XX
OS      Homo sapiens.
XX
PN      WO200202820-A1.
XX
PD      10-JAN-2002.
XX
PF      02-JUL-2001; 2001WO-US020951.
XX
PR      30-JUN-2000; 2000US-021551P.
XX
PA      (GENA-) GENAISSANCE PHARM INC.
XX
PI      Anastasio AE, Chew A, Choi JY, Kazemi A, Koshy B, Sausker EA;
PI      Stephens CJ;
XX
DR      WPI; 2002-164539/21.
XX
PT      Amyloid beta precursor protein binding protein 159 kD (APPBP1) gene
PT      polymorphic variants, useful e.g. in studying the expression and function
PT      of APPBP1 and screening candidate drugs for treating Alzheimer's disease.
XX
PS      Claim 17; Page 13; 104pp; English.
XX
CC      The invention relates to an isolated polypeptide comprising a sequence
CC      which is a polymorphic variant of a reference sequence for the amyloid
CC      beta precursor protein binding protein 1, 59kD (APPBP1) protein or its
CC      fragment. The polymorphic variants are useful in studying the expression
CC      and function of APPBP1, in expressing APPBP1 protein for use in screening
CC      for candidate drugs to treat diseases related to APPBP1 activity, in
CC      studying the effect of the variation on the biological activity of
CC      APPBP1, and the binding affinity of candidate drugs targeting APPBP1 for
CC      the treatment of disorders such as Alzheimer's disease. The haplotyping
CC      methods are useful in validating APPBP1 as a candidate target for
CC      treating a specific condition or disease predicted to be associated with
CC      APPBP1 activity, or in the design of clinical trials of candidate drugs
CC      for treating a specific condition or disease associated with APPBP1
CC      activity. The transgenic animals are useful for studying expression of
CC      the APPBP1 isogenes in vivo, for in vivo screening and testing of drugs
CC      targeted against APPBP1 protein, and for testing the efficacy of
CC      therapeutic agents and compounds for disorders related to platelet
CC      aggregation in a biological system. ABK32771-ABK32327 represent human
CC      APPBP1 gene allele-specific oligonucleotides used in the method of the
CC      invention
XX
SQ      Sequence 15 BP; 13 A; 1 C; 0 G; 0 T; 0 U; 1 Other;

Query Match      0.5%; Score 13.6; DB 1; Length 15;
Best Local Similarity 92.9%; Pred. No. 2.7e+03;
Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY      2166 TTTTTTTTTTTTTT 2179
Db      |||||
        15 TTTTTTTTTTTTTT 2
```

```
RESULT 4866
AAC82914/C
ID      AAC82914 standard; DNA; 20 BP.
XX
AC      AAC82914;
XX
DT      21-MAR-2001 (first entry)
XX
DE      Human beta-actin derived oligonucleotide #7.
XX
KW      Recognition system; screening; identification; pharmaceutical; toxin;
KW      plant protection agent; toxin; venom; carcinogen; venom; teratogen;
KW      herbicide; fungicide; pesticide; beta-actin; human; ss.
XX
OS      Homo sapiens.
XX
PN      DE19923966-A1.
XX
PD      30-NOV-2000.
XX
PF      25-MAY-1999; 99DE-01023966.
XX
PR      25-MAY-1999; 99DE-01023966.
XX
PA      (AVET ) AVENTIS RES & TECHNOLOGIES GMBH & CO KG.
XX
PI      Boekenkamp D, Hoppe H, Burgstaller P;
XX
DR      WPI; 2001-050938/07.
XX
PT      Recognition system, e.g. for identifying nucleic acids, comprises at
PT      least one recognition unit comprising a region with a defined structure
PT      adjacent to a region with a randomized structure.
XX
PS      Example; Fig 1; 8pp; German.
XX
CC      This invention describes a novel recognition system comprising at least 1
CC      recognition unit bound to a support, each recognition unit comprising a
CC      region A with a defined structure adjacent to a region B with a
CC      randomized structure. The recognition system is useful for screening,
CC      identifying, or characterizing at least 1 component of a sample,
CC      especially nucleic acids and/or proteins, and for screening for and/or
CC      identifying cellular or synthetic binding partners, preferably proteins,
CC      peptides, nucleic acids, chemical agents, preferably organic compounds,
CC      pharmaceuticals, plant protection agents, toxins, venoms, carcinogens,
CC      teratogens, herbicides, fungicides or pesticides
XX
SQ      Sequence 20 BP; 2 A; 1 C; 2 G; 15 T; 0 U; 0 Other;

Query Match      0.5%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 4.5e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY      2779 AGAATTGAAAAAAAAAAAAA 2798
Db      |||
        20 ACAGCTTAAAAAAAAAAAAA 1

RESULT 4867
AAC82912/C
ID      AAC82912 standard; DNA; 20 BP.
XX
AC      AAC82912;
XX
DT      21-MAR-2001 (first entry)
XX
DE      Human beta-actin derived oligonucleotide #5.
XX
KW      Recognition system; screening; identification; pharmaceutical; toxin;
KW      plant protection agent; toxin; venom; carcinogen; venom; teratogen;
KW      herbicide; fungicide; pesticide; beta-actin; human; ss.
```





Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
Miller S, Tang L, Shahabuddin S;  
WPI; 2003-229219/22.

Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or ubiquinone.

Disclosure; SEQ ID NO 4755; 872pp; English.

The invention relates to a novel pharmaceutical composition, which has a first active agent comprising an oligonucleotide antisense to the initiation codon, coding region, 5' or 3' end genomic flanking regions, 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of junctions of genes encoding a polypeptide associated with lung and/or nasal airway dysfunction and a second active agent comprising an antiinflammatory steroid and ubiquinone. A composition of the invention has antiinflammatory, antiallergic, antiasthmatic, hypotensive, immunosuppressive, and cytostatic activity. The composition may have a use in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or malignant disease or condition, also for enhancing the prophylactic or therapeutic respiratory effect of an antiinflammatory steroid in a subject, for reducing or depleting levels of, or reducing sensitivity to adenosine, reducing levels of adenosine receptor, producing bronchodilation, increasing levels of ubiquinone or lung surfactant in a subject's tissue, or treating bronchoconstriction, lung inflammation, lung allergies, or a respiratory disease or condition. Note: The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from WIPO at [ftp.wipo.int/pub/published\\_pct\\_sequences](http://ftp.wipo.int/pub/published_pct_sequences)

Sequence 20 BP; 3 A; 1 C; 1 G; 15 T; 0 U; 0 Other;

Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
Miller S, Tang L, Shahabuddin S;  
WPI; 2003-229219/22.

Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or ubiquinone.

Claim 15; SEQ ID NO 913; 872pp; English.

The invention relates to a novel pharmaceutical composition, which has a first active agent comprising an oligonucleotide antisense to the initiation codon, coding region, 5' or 3' end genomic flanking regions, 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of junctions of genes encoding a polypeptide associated with lung and/or nasal airway dysfunction and a second active agent comprising an antiinflammatory steroid and ubiquinone. A composition of the invention has antiinflammatory, antiallergic, antiasthmatic, hypotensive, immunosuppressive, and cytostatic activity. The composition may have a use in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or malignant disease or condition, also for enhancing the prophylactic or therapeutic respiratory effect of an antiinflammatory steroid in a subject, for reducing or depleting levels of, or reducing sensitivity to adenosine, reducing levels of adenosine receptor, producing bronchodilation, increasing levels of ubiquinone or lung surfactant in a subject's tissue, or treating bronchoconstriction, lung inflammation, lung allergies, or a respiratory disease or condition. Note: The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from WIPO at [ftp.wipo.int/pub/published\\_pct\\_sequences](ftp.wipo.int/pub/published_pct_sequences)



PI Taeusch H, Jacobs KA, Steinbrink DR, Floros J, Davis DS;  
XX WPI; 1987-108682/15.  
XX Pulmonary surfactant proteins - used for treating Hyaline Membrane  
PT Disease or Respiratory Distress Syndrome.  
XX Disclosure; Page 26; 50pp; English.  
PS  
XX Probe was used to isolate the 35kd PSP encoding sequence from pulmonary  
CC material of an alveolar proteinosis patient. PSP may be used in treatment  
CC of Hyaline Membrane Disease and Respiratory Distress Syndrome (RDS) in  
CC both premature infants and adults eg. cardio-pulmonary operations. The  
CC protein products may also be used to raise diagnostic antibodies.  
CC (Updated on 25-MAR-2003 to correct PR field.) (Updated on 25-MAR-2003 to  
CC correct PA field.) (Updated on 25-MAR-2003 to correct PI field.)  
XX  
SQ Sequence 20 BP; 0 A; 4 C; 3 G; 9 T; 0 U; 4 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 68.4%; Pred. No. 4.5e+03;  
Matches 13; Conservative 3; Mismatches 3; Indels 0; Gaps 0;  
QY 1486 AACCTGAGAGAAATGGAG 1504  
Db ||:|||||:|:  
20 AAYCCNGAAGAAAYGARG 2  
RESULT 4872  
AAQ05898  
ID AAQ05898 standard; DNA; 20 BP.  
XX  
AC AAQ05898;  
XX  
DT 17-DEC-2001 (revised)  
DT 16-JAN-1991 (first entry)  
XX  
DE Probe AD03 to detect Listeria monocytogenes.  
XX  
KW Listeria monocytogenes; probe AD03; dairy products; milk; cheese; ss.  
XX  
OS Synthetic.  
XX  
PN USN7411965-N.  
XX  
PD 21-AUG-1990.  
XX  
PF 25-SEP-1989; 89US-00411965.  
XX  
PR 25-SEP-1989; 89US-00411965.  
XX  
PA (USSH ) US FOOD & DRUG ADM.  
XX  
PI Datta A;  
XX  
DR WPI; 1990-290094/38.  
XX  
PT Synthetic Listeria monocytogenes oligo-nucleotide probes - used for  
PT detection and enumeration of organism in dairy prods. e.g. milk and  
PT cheese.  
XX  
PS Disclosure; Page 18; 23pp; English.  
XX  
CC This probe, from construct M13-mp19, is complementary to bases 167-186 of  
CC the sequence represented in AAQ05931, which is the presumptive hemolysin  
CC gene of L. monocytogenes. The probe is used for detection and enumeration  
CC of L.monocytogenes, esp. for detection in dairy prods. such as milk and  
CC cheese by colony hybridisation assays. See also AAQ05898-900 and AAQ05930  
CC -31. (Note: Revised entry submitted to correct the patent number format  
CC of US Government-owned NTIS applications to prevent clashes with ongoing  
CC US granted patent numbers. For further information please visit the  
CC Derwent web site at [www.derwent.com/dwpi/updates/ntis\\_us.html](http://www.derwent.com/dwpi/updates/ntis_us.html).)  
XX

SQ Sequence 20 BP; 5 A; 6 C; 5 G; 4 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 708 ACGACCACACCTGTTGCTG 727  
Db ||:|||||:|:  
1 ACAAGCTGCACCTGTTGCAG 20  
RESULT 4873  
AAQ35728/c  
ID AAQ35728 standard; DNA; 20 BP.  
XX  
AC AAQ35728;  
XX  
DT 25-MAR-2003 (revised)  
DT 24-FEB-1993 (first entry)  
XX  
DE EIV 5' fragment primer A2F5P.  
XX  
KW Expression cassette; equine influenza virus; EIV; hemagglutinin; HA;  
KW A2/Fontainebleau/79; NYVAC; ALVAC; recombinant vector; canarypox;  
KW polymerase chain reaction; vaccinia virus; H6 promoter; amplify;  
KW Copenhagen vaccine; virulence factor; deletion loci; recipient loci; PCR;  
KW ss.  
XX  
OS Synthetic.  
XX  
PN WO9215672-A1.  
XX  
PD 17-SEP-1992.  
XX  
PF 09-MAR-1992; 92WO-US001906.  
XX  
PR 07-MAR-1991; 91US-00666056.  
PR 11-JUN-1991; 91US-00713967.  
PR 06-MAR-1992; 92US-00847951.  
XX  
PA (VIRO-) VIROGENETICS CORP.  
XX  
PI Paoletti E, Perkus ME, Taylor J, Tartaglia J, Norton EK;  
PI Riviere M, De Taisne C, Limbach KJ, Johnson GP, Pincus SE, Cox WI;  
PI Francis J, Gettig RR;  
XX  
DR WPI; 1992-331718/40.  
XX  
PT Vaccine comprises recombinant, attenuated pox-virus - use for vaccinating  
PT against viral infections such as rabies, hepatitis B, HIV, HSV, EBV, CMV,  
PT mumps etc.  
XX  
PS Disclosure; Page 222; 456pp; English.  
XX  
CC The sequences given in AAQ35724-32 were used to generate an expression  
CC cassette for the insertion of the equine influenza virus (EIV)  
CC hemagglutinin (HA) (A2/Fontainebleau/79) into NYVAC and ALVAC recombinant  
CC vectors. The HA gene sequence was isolated from an EIV cDNA library and  
CC was amplified by polymerase chain reaction. The HA gene sequence was  
CC fragmented and then reconstituted aligned with the vaccinia virus H6  
CC promoter. NYVAC is derived from a Copenhagen vaccine strain of vaccinia  
CC virus and ALVAC is derived from a canarypox virus which has been modified  
CC by deletion of non-essential regions of the genome encoding known or  
CC potential virulence factors. The deletion loci of both vectors were  
CC engineered as recipient loci for the insertion of foreign genes. See also  
CC AAQ35501-864. (Updated on 25-MAR-2003 to correct PN field.)  
XX  
SQ Sequence 20 BP; 7 A; 3 C; 3 G; 7 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 2509 CATCATAGGTTTATTTCAT 2528  
Db 20 CAAAATAAGGTGTCTTCAT 1

RESULT 4874  
AAQ41529  
ID AAQ41529 standard; DNA; 20 BP.  
XX  
AC AAQ41529;  
XX  
DT 25-MAR-2003 (revised)  
DT 10-AUG-1993 (first entry)  
XX  
DE Antisense oligomer targetting EBER-2 internal sequence.  
XX  
KW Epstein Barr virus; EBV; hybridisation; antisense modulator; replication;  
KW nasopharyngeal carcinoma; Burkitt lymphoma; Sjogren's; syndrome;  
KW infectious mononucleosis; latent; active; infection; ss.  
XX  
OS Synthetic.  
XX  
PN WO9307882-A1.  
XX  
PD 29-APR-1993.  
XX  
PF 23-OCT-1992; 92WO-US008989.  
XX  
PR 25-OCT-1991; 91US-00783605.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Anderson KP, Ecker DJ;  
XX  
DR WPI; 1993-152174/18.  
XX  
PT Oligo:nucleotide(s) hybridising with RNA of Epstein Barr virus - for  
PT treating active, latent and chronic EBV infections and associated  
PT diseases e.g. nasopharyngeal carcinoma, Burkitt's lymphoma.  
XX  
PS Claim 1; Page 20; 45pp; English.  
XX  
CC The synthetic peptide is an antisense modulator of Epstein Barr virus and  
CC pref. contains at least one phosphorothioate linking gp. and  
CC modifications in the 2' position. These modifications improve penetration  
CC into regions of the cell that contain nucleic acid and also resistance to  
CC degradation by nucleases. The oligonucleotide targets an EBER-2 internal  
CC sequence and hybridises, thus inhibiting replication of EBV. The oligomer  
CC may be used for treating or preventing EBV-associated diseases, e.g.  
CC nasopharyngeal carcinoma, Burkitt's lymphoma, Sjogren's syndrome,  
CC infectious mononucleosis etc. The oligomer is effective against both  
CC latent and active EBV infection. See also AAQ40575-9 and AAQ41517-44.  
CC (Updated on 25-MAR-2003 to correct PN field.)  
XX  
SQ Sequence 20 BP; 3 A; 6 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1043 AGCGGAAAGCCGTCATGT 1062  
Db 1 AGCGGGAAGCCTCTCTCT 20

RESULT 4875  
AAQ46060  
ID AAQ46060 standard; DNA; 20 BP.  
XX  
AC AAQ46060;  
XX  
DT 25-MAR-2003 (revised)  
DT 08-FEB-1994 (first entry)

XX  
DE Sequence of PCR primer AD03 for the amplification of iap (beta-  
DE haemolysin) virulence factor.  
XX  
KW Virulence factor; Listeria detection; food poisoning; iap; PCR;  
KW beta-haemolysin; primer; ss.  
XX  
OS Synthetic.  
XX  
PN CH682156-A5.  
XX  
PD 30-JUL-1993.  
XX  
PF 28-JUN-1990; 90CH-00002190.  
XX  
PR 28-JUN-1990; 90CH-00002190.  
XX  
PA (CAND/) CANDRIAN U.  
PA (FURR/) FURRER B.  
PA (HOEF/) HOEFELEIN C.  
PA (LUET/) LUETHY J.  
XX  
PI Candrian U, Furrer B, Hoefelein C, Luethy J;  
XX  
DR WPI; 1993-265174/34.  
XX  
PT Listeria monocytogenes detection by enzymatic nucleic acid amplification  
PT - using oligo-nucleotide(s) derived from alpha-haemolysin and/or beta-  
PT haemo-lysin virulence factors in polymerase chain reactions.  
XX  
PS Claim 3; Page 2; 2pp; German.  
XX  
CC Oligos L01, L02, L03 and L04 are used for the amplification of hly (alpha  
CC -haemolysin) virulence factor; and oligos AD07, AD08 and AD09 are used  
CC for the amplification of iap (beta-haemolysin) virulence factor. They are  
CC used in a detection method for Listeria monocytogenes in food samples  
CC which is faster and more sensitive than the classical bacteriological  
CC methods. (Updated on 25-MAR-2003 to correct PN field.)  
XX  
SQ Sequence 20 BP; 5 A; 6 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 708 ACGACCAACACCTGTTGCTG 727  
Db 1 ACAAGCTGCACCTGTTGCAG 20

RESULT 4876  
AAQ34754/c  
ID AAQ34754 standard; DNA; 20 BP.  
XX  
AC AAQ34754;  
XX  
DT 25-MAR-2003 (revised)  
DT 03-JUN-1993 (first entry)  
XX  
DE Blocker oligonucleotide CFTR(C).  
XX  
KW Cystic Fibrosis transregulator; assay; ss.  
XX  
OS Synthetic.  
XX  
PN WO9301313-A1.  
XX  
PD 21-JAN-1993.  
XX  
PF 06-JUL-1992; 92WO-GB001229.  
XX  
PR 05-JUL-1991; 91GB-00014525.

PA (CYTO-) CYTOCELL LTD.  
XX  
PI Cardy DLN, Delnatte SYJ;  
XX  
DR WPI; 1993-045514/05.  
XX  
PT Homogeneous assay for nucleic acid sequences - obtd. by modulating enzyme  
PT activity, by hybridisation of derived nucleic acid probes.  
XX  
PS Example 1; Page 22; 51pp; English.  
XX  
CC The blocker oligonucleotide CFTR(C) comprises a sequence complementary to  
CC a site on the CFTR gene adjacent to that of the activator oligonucleotide  
CC probes CFRT(A) and CFA508(A). The nucleotide was synthesised with a 5'  
CC bromodeoxyuridine nucleoside and may be used in an assay for the  
CC detection of Cystic Fibrosis transregulator (CFTR) related genes in human  
CC DNA. See also AAQ34750-62. (Updated on 25-MAR-2003 to correct PN field.)  
XX  
SQ Sequence 20 BP; 9 A; 2 C; 3 G; 6 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 1994 TGTATCTAGCTTCTTCAGAG 2013  
Db TGTATCTATATTCATCATAG 1  
  
RESULT 4877  
AAQ70719/c  
ID AAQ70719 standard; DNA; 20 BP.  
XX  
AC AAQ70719;  
XX  
DT 25-MAR-2003 (revised)  
DT 22-FEB-1995 (first entry)  
XX  
DE C-myc gene antisense oligo.  
XX  
KW C-myc; oncogene; smooth muscle; antisense; phosphorothioate;  
XX oligonucleotide; restenosis; ss.  
OS Synthetic.  
XX  
PN WO9415646-A1.  
XX  
PD 21-JUL-1994.  
XX  
PF 07-JAN-1994; 94WO-US000265.  
XX  
PR 07-JAN-1993; 93US-00004799.  
XX  
PA (UYJE-) UNIV JEFFERSON THOMAS.  
XX  
PI Zalewski A, Shi Y;  
XX  
DR WPI; 1994-248909/30.  
XX  
PT Use of antisense oligonucleotides specific for c-myc - for modulating the  
PT proliferation of smooth muscle cells, partic. for treating or preventing  
PT restenosis.  
XX  
PS Example 12; Page 29; 52pp; English.  
XX  
CC An oligonucleotide (AAQ70710) antisense to a segment of human c-myc mRNA  
CC beginning with a translational initiation codon reduced neointima  
CC formation in the coronary vasculature in a pig restenosis model. Activity  
CC was compared to that of antisense oligos (AAQ70715-21) that targeted  
CC other regions of c-myc mRNA. The oligo given in AAQ70719 targeted  
CC nucleotides 1264-1283 of the 5' non-coding region, and provided a similar  
CC degree of growth inhibition as the AAQ70710 oligo. (Updated on 25-MAR-  
CC 2003 to correct PN field.)

XX  
SQ Sequence 20 BP; 4 A; 6 C; 7 G; 3 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 653 GAGAACCTGGGGCTCCACGA 672  
Db GAGCCCCTGGTGCTCCATGA 1  
  
RESULT 4878  
AAQ71313  
ID AAQ71313 standard; DNA; 20 BP.  
XX  
AC AAQ71313;  
XX  
DT 25-MAR-2003 (revised)  
DT 25-APR-1995 (first entry)  
XX  
DE Primer for the detection of recombinant viruses.  
XX Recombinant viruses; retro-viruses; PCR primer; ss.  
KW  
XX Synthetic.  
OS  
XX WO9419491-A1.  
PN  
XX 01-SEP-1994.  
PD  
XX 16-FEB-1994; 94WO-US001643.  
PF  
XX 17-FEB-1993; 93US-00018118.  
PR  
XX (GENE-) GENETIC THERAPY INC.  
PA  
XX Otto RE, Allen CL;  
PI  
XX WPI; 1994-294351/36.  
DR  
XX  
XX  
PT Detecting recombination of viral nucleic acid sequences - by amplifying  
PT recombinant product with specific primers, esp. for detecting replication  
PT competent retro-viruses produced by gene therapy.  
XX  
PS Example 1; Page 35; 51pp; English.  
XX  
CC AAQ71313 was used in combination with AAQ71312 to prime the PCR  
CC amplification of replication competent, recombined viruses (esp. retro-  
CC or adeno-viruses). This enabled the viruses to be detected in very small  
CC concentrations (eg. 1 in 100 000 cells), in body fluids and tissue  
CC samples (useful in gene therapy), and in viral vector preparations, cell  
CC lines and transduced target cells. (Updated on 25-MAR-2003 to correct PN  
CC field.)  
XX  
SQ Sequence 20 BP; 7 A; 7 C; 3 G; 3 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 785 CTCCTCTGTCAGAGGAGCT 804  
Db CCCCCTGTCAGAGAAAGACT 20  
  
RESULT 4879  
AAQ97446/c  
ID AAQ97446 standard; DNA; 20 BP.  
XX  
AC AAQ97446;  
XX  
DT 20-MAR-1996 (first entry)

XX Phage lambda J gene (18872-18891) PCR primer CF1018.  
XX PCR amplification; thermostable DNA polymerase; combination;  
KW large fragment; genomic mapping; sequence analysis; ss.  
XX  
OS Synthetic.  
XX  
PN EP669401-A2.  
XX  
XX 30-AUG-1995.  
PD  
XX  
XX 16-FEB-1995; 95EP-00102141.  
PF  
XX 25-FEB-1994; 94US-00203198.  
PR  
XX (HOFF ) HOFFMANN LA ROCHE & CO AG F.  
PA  
XX Cheng S;  
PI  
XX WPI; 1995-294352/39.  
DR  
XX PCR amplification of long nucleic acid sequences - using a combination of  
PT the Thermus thermophilus and pref. Thermococcus litoralis DNA polymerase.  
PT  
XX Example 3; Page 13; 25pp; English.  
PS  
XX Primers CF1018 and CF1019 were designed from sequences within the J and  
CC cro genes of phage lambda and were used to amplify sequences from  
CC randomly selected plaques from the human genomic library in lambda FIX  
CC II. A new method was used to amplify the large genomic sequences in which  
CC Thermus thermophilus DNA polymerase was used in combination with a second  
CC DNA polymerase from Thermococcus litoralis, Pyrococcus sp. or Thermatoga  
CC maritima. The size of the amplified inserts ranged from less than 10 kb  
CC to greater than 20 kb  
XX  
SQ Sequence 20 BP; 6 A; 5 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 707 GAGCACCAGCACCTGTGCT 726  
||| ||||| ||||| ||  
Db 20 GATGCCCCAGCGCTGTTCT 1

RESULT 4880  
AAT41357  
ID AAT41357 standard; DNA; 20 BP.  
XX  
AC AAT41357;  
XX  
DT 04-DEC-1996 (first entry)  
XX  
DE Human gene signature HUMGS01460-derived sense primer.  
XX  
KW Gene signature; messenger RNA; mRNA; relative abundance; frequency;  
KW human; cloning; mapping; non-biased library; diagnosis; detection;  
KW cell typing; abnormal cell function; primer; PCR; amplification;  
KW polymerase chain reaction; ss.  
XX  
OS Synthetic.  
XX  
PN WO9514772-A1.  
XX  
PD 01-JUN-1995.  
XX  
PF 11-NOV-1994; 94WO-JP001916.  
XX  
PR 12-NOV-1993; 93JP-003555504.  
XX  
PA (MATS/) MATSUBARA K.

PA (OKUB/) OKUBO K.  
XX  
PI Matsubara K, Okubo K;  
XX  
DR WPI; 1995-206931/27.  
XX  
PT Single-stranded DNA for identifying gene signatures - isolated from 3'-  
PT directed human cDNA library that reflects relative abundance of corresp.  
PT mRNA in specific human tissues.  
XX  
PS Example 7; Fig 10; 2245pp; Japanese.  
XX  
CC Primers T41001-T41382 are derived from novel human gene signature (GS)  
CC sequences which did not match with sequences deposited in Genbank release  
CC 76. The GS sequences (T19001-T26837) were obtained from 3'-directed cDNA  
CC libraries prepared from various human tissues; synthesis of cDNA was  
CC initiated from the 3'-end of mRNA by using poly(T) as the sole primer.  
CC Each library is constructed so as to reflect accurately the relative  
CC abundance of different mRNAs in the particular tissue from which it was  
CC derived. The appearance frequency of a given GS in a cDNA library can be  
CC determined (esp. using primers and probes derived from the GS sequences)  
CC as a means of diagnosing abnormal cell function or for recognising  
CC different cell types. The primers T41357-8 amplify clone pm2626 which  
CC comprises the GS HUMGS001460 (T20460). This amplification reaction gave a  
CC prod. indistinguishable from the same PCR using mouse or Chinese hamster  
CC ovary DNA as a template  
XX  
SQ Sequence 20 BP; 6 A; 1 C; 8 G; 5 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 2478 ACTTTTAAATGGTGATGGGT 2497  
||| ||||| ||||| ||  
Db 1 ACATTGAATGGGATGAGGT 20

RESULT 4881  
AAT41087/c  
ID AAT41087 standard; DNA; 20 BP.  
XX  
AC AAT41087;  
XX  
DT 03-DEC-1996 (first entry)  
XX  
DE Human gene signature HUMGS01461-derived sense primer.

XX Gene signature; messenger RNA; mRNA; relative abundance; frequency;  
KW human; cloning; mapping; non-biased library; diagnosis; detection;  
KW cell typing; abnormal cell function; primer; PCR; amplification;  
KW polymerase chain reaction; ss.  
XX  
OS Synthetic.  
XX  
PN WO9514772-A1.  
XX  
PD 01-JUN-1995.  
XX  
PF 11-NOV-1994; 94WO-JP001916.  
XX  
PR 12-NOV-1993; 93JP-003555504.  
XX  
PA (MATS/) MATSUBARA K.  
PA (OKUB/) OKUBO K.  
XX  
PI Matsubara K, Okubo K;  
XX  
DR WPI; 1995-206931/27.  
XX

PT Single-stranded DNA for identifying gene signatures - isolated from 3'-  
PT directed human cDNA library that reflects relative abundance of corresp.  
PT mRNA in specific human tissues.





Best Local Similarity	80.0%;	Pred. No. 4.5e+03;
Matches	16; Conservative	0; Mismatches 4; Indels 0; Gaps 0;

**Qy**      2672 CAGTGTGTGTTGGTGAAATG 2691  
          ||| | | | | | | |  
**Dβ**      20 CAT TGT GTG TCCTG AGATG 1

RESULT 4884  
AAT60649/c  
ID AAT60649 standard; DNA; 20 BP.

DT 26-JUN-1997 (first entry)

Antisense oligonucleotide #3 targetting nuclear proto-oncogene.

Nuclear proto-oncogene; antisense oligonucleotide; inhibitor; collagen; extracellular matrix protein; haemodialysis; vascular graft; therapy; human tissue; sclerotic disorder; scar formation; vascular stenosis; fibrous connective tissue; atherosclerosis; post-surgical scarring; atherogenesis; kaloid disease; liver cirrhosis; rheumatical disorder; reconstructive surgery; ss.

Synthetic.

WO9632966-A1.

24-OCT-1996.

19-APR-1996; 96WO-US005334.

19-APR-1995; 95US-00424991.

(UYJE-) UNIV JEFFERSON THOMAS.

Zalewski A, Shi Y;

WPI; 1996-485560/48.

Use of anti:sense cpds. to inhibit inappropriate synthesis - in tissue of extracellular matrix proteins, particularly collagen, esp. type I and type III.

Claim 58; Page 64; 103pp; English.

AAT60643, and AAT60647-T60653 represent antisense oligonucleotides specific for a nuclear proto-oncogene. These sequences are used in a composition of the invention, for inhibiting synthesis of extracellular matrix proteins. These sequences can also be used in the methods of the invention. The methods of the invention all involve using at least one of these sequences to prevent or treat a disease. The methods are for preventing failure of a haemodialysis access site (HAS) of a haemodialysis patient, for treating vascular grafts and/or in an ex vivo method for preventing failure of vascular grafts made with veins, and for inhibiting the synthesis of extracellular matrix proteins in a human tissue. Other methods of the invention are for treating sclerotic disorders, for reducing scar formation in a human tissue, and for inhibiting formation of unwanted fibrous connective tissue in a human. The methods relate to the use of certain antisense compounds to inhibit the inappropriate synthesis in a tissue of extracellular matrix proteins, particularly collagen, and more particularly collagens type I and III. The inappropriate and/or excessive synthesis of extracellular matrix proteins can result in medical conditions, including sclerotic disorders, vascular restenosis, or atherosclerosis, atherogenesis, kалoid disease, liver cirrhosis, rheumatical disorders of the joints, loss of arteriovenous and venous graft potency, post-surgical scarring, reconstructive surgery and the like, generally found in human subjects

Sequence 20 BP; 4 A; 6 C; 7 G; 3 T; 0 U; 0 Other;

Query Match	Score 13.6;	DB 1;	Length 20;
	0.5%		

Best Local Similarity	80.0%;	Pred. No.	4.5e+03;
Matches	16;	Mismatches	4;
	Conservative	Indels	0;
		Gaps	0;

Qy	653	GAGAACCTGGGGCTCCACGA	672
Db	20	GAGCCCCCTGGTGTCCATGA	1

RESULT 4885  
AAT60650/C

DT 26-JUN-1997 (first entry)

DE Antisense oligonucleotide #4 targetting nuclear proto-oncogene.

Nuclear proto-oncogene; antisense oligonucleotide; inhibitor; collagen;  
extracellular matrix protein; haemodialysis; vascular graft; therapy;  
human tissue; sclerotic disorder; scar formation; vascular restenosis;  
fibrous connective tissue; atherosclerosis; post-surgical scarring;  
atherogenesis; kaloid disease; liver cirrhosis; rheumatical disorder;  
reconstructive surgery; ss.

OS Synthetic.

AA PN W09632966-A1.

24-OCT-1996.

19-APR-1996: 96WO-US005334.

PR 19-APR-1995; 95US-00424991.

PA (UYJE-) UNIV JEFFERSON THOMAS.

PI Zalewski A, Shi Y;

DR WPI; 1996-485560/48.

PT	Use of anti:sense cpds. to inhibit inappropriate synthesis - in tissue of
PT	extracellular matrix proteins, particularly collagen, esp. type I and
PT	type III.

PS Disclosure; Page 64; 103pp; English.

AAT60643, and AAT60647-T60653 represent antisense oligonucleotides specific for a nuclear proto-oncogene. These sequences are used in a composition of the invention, for inhibiting synthesis of extracellular matrix proteins. These sequences can also be used in the methods of the invention. The methods of the invention all involve using at least one of these sequences to prevent or treat a disease. The methods are for preventing failure of a haemodialysis access site (HAS) of a haemodialysis patient, for treating vascular grafts and/or in an ex vivo method for preventing failure of vascular grafts made with veins, and for inhibiting the synthesis of extracellular matrix proteins in a human tissue. Other methods of the invention are for treating sclerotic disorders, for reducing scar formation in a human tissue, and for inhibiting formation of unwanted fibrous connective tissue in a human. The methods relate to the use of certain antisense compounds to inhibit the inappropriate synthesis in a tissue of extracellular matrix proteins, particularly collagen, and more particularly collagens type I and III. The inappropriate and/or excessive synthesis of extracellular matrix proteins can result in medical conditions, including sclerotic disorders, vascular restenosis, or atherosclerosis, atherogenesis, kалoid disease, liver cirrhosis, rheumatical disorders of the joints, loss of arteriovenous and venous graft potency, post-surgical scarring, reconstructive surgery and the like, generally found in human subjects

SQ Sequence 20 BP; 4 A; 6 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 653 GAGAACCTGGGGCTCCACGA 672  
Db 20 GAGCCCTGGTGCTCCATGA 1

RESULT 4886  
AAT48940/C  
ID AAT48940 standard; DNA; 20 BP.  
XX AC AAT48940;  
XX DT 18-SEP-1997 (first entry)  
XX DE Complementary human MRP oligonucleotide OL(8)MRP prototype.  
XX KW Human multidrug resistance-1; MDR-1; inhibition; aptameric;  
XX KW human multidrug resistance-associated protein; antisense; cytotoxic;  
XX KW chemotherapeutic; cancer; ss.  
OS Synthetic.

XX FH Key Location/Qualifiers  
XX FT misc\_feature 1..20  
XX FT /tag= a  
XX FT /note= "Backbone selected from: phosphorothioate;  
XX FT dithioate; methylphosphonate; phosphodiester; morpholino  
XX FT backbone; polyamide backbone; and any combination of  
XX FT these backbone types; the backbone may be modified to  
XX FT incorporate a ribozyme structure, or a pendant group"

XX PN WO9640715-A1.  
XX PD 19-DEC-1996.  
XX PF 06-JUN-1996; 96WO-US009388.  
XX PR 07-JUN-1995; 95US-00487141.  
XX PA (UYNE-) UNIV NEBRASKA.  
XX PI Smith LJ;  
XX PS WPI; 1997-052217/05.

XX PT Oligo-nucleotide(s) able to inhibit multi:drug resistant phenotype -  
XX PT either by anti:sense or aptameric effects, useful for enhancing cytotoxic  
XX PT effects of chemotherapeutic agents on multi:drug resistant cancer cells.

XX PS Claim 16; Page 17; 74pp; English.  
XX CC The present sequence represents a novel oligonucleotide OL(8)MRP  
XX CC prototype that specifically hybridises in a human cell with a  
XX CC complementary sequence of human multidrug resistance-associated protein  
XX CC (MRP) gene. Hybridisation causes inhibition of expression of the  
XX CC multidrug resistance phenotype by the cell, due to the oligonucleotide  
XX CC having an aptameric inhibitory effect as well as an antisense inhibitory  
XX CC effect. The oligonucleotide is administered to cancer patients to prevent  
XX CC with chemotherapeutic agents, the oligonucleotide is useful for  
XX CC potentiating elimination of multidrug resistant tumour cells from bone  
XX CC marrow or peripheral stem cell grafts. Also, the oligonucleotide can be  
XX CC used as an immunosuppressive agent

SQ Sequence 20 BP; 3 A; 3 C; 11 G; 3 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 415 CGCGCGCCCATCAACCCC 434

Db 20 CGCGCCCATCATCCCGC 1

RESULT 4837  
AAT50903/C  
ID AAT50903 standard; DNA; 20 BP.  
XX AC AAT50903;  
XX DT 26-AUG-1997 (first entry)  
XX DE Probe #17 for interleukin-6 receptor.

XX KW Probe; interleukin-6 receptor; IL-6R; cytokine; cellular proliferation;  
XX KW transmembrane glycoprotein receptor; signal transducer; gpl30; inhibitor;  
XX KW IL-6; cancer; renal cell carcinoma; autoimmune disease; viral infection;  
XX KW therapy; ss.

OS Synthetic.  
XX FH Key Location/Qualifiers  
XX FT misc\_feature 1..20  
XX FT /tag= a  
XX FT /note= "optionally phosphorothioated"

XX PN EP747386-A2.  
XX PD 11-DEC-1996.  
XX PF 07-JUN-1996; 96EP-00304315.  
XX PR 07-JUN-1995; 95US-00484666.  
XX PR 07-JUN-1995; 95US-00486408.

XX PA (GENP-) GEN-PROBE INC.

XX PI Brown SJ, Dattagupta N, Naidu YM;

XX DR WPI; 1997-023093/03.

XX PT Oligo:nucleotide(s) complementary to interleukin-6 receptor mRNA - for  
XX PT treating proliferative diseases, e.g. cancer, auto-immune diseases or  
XX PT viral infections.

XX PS Claim 1; Page 16; 18pp; English.

XX CC AAT50887-T50904 represent oligonucleotides of the invention. These  
XX CC sequences are all probes for interleukin-6 receptor (IL-6R) mRNA. IL-6 is  
XX CC one of the most well characterised of the cytokines. It functions through  
XX CC interacting with at least two transmembrane glycoprotein receptor  
XX CC molecules on the surface of target cells. The receptors are the IL-6R,  
XX CC and the signal transducer gpl30. Signal transduction by IL-6 involves the  
XX CC concerted action of both IL-6R and gpl30. IL-6 overproduction is  
XX CC implicated in many different disease states, particularly in cellular  
XX CC proliferation associated with these diseases. These sequences bind to the  
XX CC IL-6R coding sequence, thereby inhibiting IL-6R production. The sequences  
XX CC therefore inhibit the functioning of IL-6. These sequences can be used  
XX CC for inhibiting disease-associated cellular proliferation. The  
XX CC oligonucleotides are especially useful for treating cancer (e.g. renal  
XX CC cell carcinoma), autoimmune diseases or viral infections. They can also  
XX CC be used as probes for detecting IL-6 receptor mRNA, especially for  
XX CC evaluating the effectiveness of drugs in reducing IL-6 receptor mRNA  
XX CC levels

SQ Sequence 20 BP; 2 A; 8 C; 6 G; 4 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 451 CACAGGCAGCCAGCAGG 470

Db 20 CTCAGGAAGCCGGCTGCAGG 1

RESULT 4888  
AAT95343/c  
ID AAT95343 standard; DNA; 20 BP.

XX  
AC AAT95343;  
XX  
DT 20-APR-1998 (first entry)  
XX  
DE Treatment of human melanoma using c-myc oligonucleotide 10.  
XX  
KW Melanoma; c-myc oligonucleotide; c-myc mRNA; cis-platin; inhibition;  
KW metastasis; treatment; proliferation; human; tumour; ss.  
XX  
OS Synthetic.  
OS Homo sapiens.  
XX  
PN WO9736005-A1.  
XX  
PD 02-OCT-1997.  
XX  
PF 24-MAR-1997; 97WO-US004703.  
XX  
PR 26-MAR-1996; 96US-0014089P.  
XX  
PA (LYNX-) LYNX THERAPEUTICS INC.  
XX  
PI Zupi G;  
XX  
DR WPI; 1997-489662/45.  
XX  
PT Inhibiting proliferation of human melanoma cells with anti-c-myc  
PT oligo:nucleotide(s) - particularly used together with cis-platin,  
PT inhibits metastasis, induces regression or prevents further growth.  
XX  
PS Claim 1; Page 22; 68pp; English.  
XX  
CC This c-myc oligonucleotide is complementary to a sequence of human c-myc  
CC mRNA and is used for inhibiting the proliferation of human melanoma cells  
CC (HMC). The c-myc oligonucleotide is at least 10 bases long and inhibits  
CC proliferation of HMC by at least 10 percent at 10 mu M, when the cells  
CC are cultured at 37 degree. C in presence of serum. The method is  
CC particularly used to treat human melanoma, and inhibits metastasis,  
CC promotes regression or prevents any increase in tumour mass. The c-myc  
CC oligonucleotide can be used together with cis-platin and which then  
CC reduces resistance of tumour cells to cis-platin. The oncogene c-myc is  
CC found to be essential for growth and metastasis of melanoma, and the c-  
CC myc oligonucleotides are designed to target double-stranded DNA or single  
CC -stranded RNA. A combination of c-myc oligonucleotide and cis-platin is  
CC more effective than either component used alone  
XX  
SQ Sequence 20 BP; 4 A; 6 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 653 GAGAACCTGGGGCTCCACGA 672  
||| ||||| ||||| |||  
Db 20 GAGCCCTGGTGTCCATGA 1

RESULT 4889  
AAT61084/c  
ID AAT61084 standard; DNA; 20 BP.  
XX  
AC AAT61084;  
XX  
DT 06-OCT-1997 (first entry)  
XX  
DE Mouse Apo E forward reverse primer.

XX primer; PCR; polymerase chain reaction; human apolipoprotein E; apo E;  
KW exon 3; transgenic mouse; screen; development; function; aging;  
KW regulation; lipid metabolism; Alzheimer's disease; neuronal disease;  
KW antibody; diagnostic test; ss.  
XX  
OS Synthetic.  
XX  
PN WO9705247-A1.  
XX  
PD 13-FEB-1997.  
XX  
PF 10-JUL-1996; 96WO-US011394.  
XX  
PR 31-JUL-1995; 95US-00509521.  
XX  
PA (UYDU-) UNIV DUKE.  
XX  
PI Roses AD, Gilbert JR, Xu P, Schnechel DE;  
XX  
DR WPI; 1997-145685/13.  
XX  
PT Transgenic animal expressing human apolipo:protein E - but no endogenous  
PT apoE, useful for screening potential therapeutic agents and for studying  
PT effects of different isoforms on brain biology, etc.  
XX  
PS Example 4; Page 14; 30pp; English.  
XX  
CC AAT61083-84 are mouse apolipoprotein E (apo E) knockout primers  
CC synthesised from the mouse DNA sequence spanning the disrupted (knockout  
CC region). PCR was performed to detect the presence of the human Apo E gene  
CC in transgenic mouse pups and to identify their genotypes. Non-human  
CC transgenic mammals comprising cells expressing a human apo E transgene  
CC and which are unable to express endogenous apo E are claimed. The animal  
CC is used to test compounds (possible therapeutic agents) for their ability  
CC to affect activities of the different apo E isoforms, and to study the  
CC effects of different isoforms on brain biology, development, function,  
CC aging, and injury, e.g. their involvement in the regulation of lipid  
CC metabolism or development of Alzheimer's or other neuronal diseases. The  
CC animal can also be a source of apo E proteins for the generation of  
CC specific antibodies, for use in diagnostic tests  
XX  
SQ Sequence 20 BP; 5 A; 3 C; 8 G; 4 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 706 CGACGACGACGACCTGTTC 725  
||| ||||| ||||| |||  
Db 20 CGAGTACCATCACCTCTTGC 1

RESULT 4890  
AAT47409  
ID AAT47409 standard; DNA; 20 BP.  
XX  
AC AAT47409;  
XX  
DT 10-SEP-1997 (first entry)  
XX  
DE Primer #35 for cystic fibrosis transmembrane regulator gene.  
XX  
KW PCR; primer; amplify; polymerase chain reaction; bacteriophage; M13mpl8;  
KW cystic fibrosis transmembrane conductance regulator gene; multiplex PCR;  
KW chimeric primer; genetic screening; mutation detection; CFTR;  
KW Wilms Tumour gene; beta-thalassaemia gene; ss.  
XX  
OS Synthetic.  
XX  
PN WO9641012-A1.  
XX  
PD 19-DEC-1996.



XX PF 06-JUN-1996; 96WO-US009637.  
XX PR 07-JUN-1995; 95US-00474450.  
XX PA (GENZ ) GENZYME CORP.  
XX PI Shuber AP;  
XX PS WPI; 1997-052372/05.  
XX DR Universal primer used for multiplex DNA amplification - allows  
XX PT simultaneous amplification of multiple DNA target sequences for high  
XX PT through-put genetic screening.  
XX XX  
XX PS Example 3; Fig 1b; 38pp; English.  
XX CC AAT47375-T47409 represent amplification primers for the cystic fibrosis  
CC transmembrane regulator (CFTR) gene. These sequences can be used as half  
CC of the chimeric primer of the invention. The primers are used for  
CC amplification of a target DNA sequence, and can be used in a multiplex  
CC PCR amplification. The primers have the sequence 5'-XY-3', where X is a  
CC sequence that does not hybridise to the target sequence (such as AAT47344  
CC -T47374), and Y is a sequence contained within or flanking the target  
CC sequence (such as this sequence). During early cycles of amplification,  
CC products are synthesised that contain the chimeric primers on either end.  
CC The primers then serve as high stringency recognition sequences for  
CC subsequent rounds of amplification. As a result, the annealing efficiency  
CC of different primers and their targets in a multiplex amplification of  
CC reaction is normalised, thereby reducing preferential amplification of  
CC certain targets. The chimeric primer comprise a 5' universal domain and a  
CC 3' target-specific domain. They are used for the simultaneous PCR  
CC amplification of multiple DNA targets in a sample. The primer containing  
CC AAT47344 is particularly useful in high-throughput genetic screening for  
CC detecting the presence of multiple defined targets e.g. to detect  
CC mutations in genes like the CFTR, the Wilms Tumour, and the beta-  
CC thalassaemia genes  
XX SQ Sequence 20 BP; 6 A; 5 C; 4 G; 5 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 710 GACCAGCACCTGTTGCTGCA 729  
Db 1 GAAAAGTACCTGTTGCTCCA 20  
RESULT 4891  
AAT76385/c  
ID AAT76385 standard; DNA; 20 BP.  
XX AC AAT76385;  
XX DT 15-SEP-1997 (first entry)  
XX DE Human tumour necrosis factor alpha antisense oligonucleotide HSTNFAAS4.  
XX KW Asthma; airway epithelium; adenosine free; cystic fibrosis;  
XX KW chronic obstructive pulmonary disease; bronchitis; ss.  
XX OS Synthetic.  
XX PN WO9640162-A1.  
XX PD 19-DEC-1996.  
XX PF 06-JUN-1996; 96WO-US009306.  
XX PR 07-JUN-1995; 95US-00474497.  
XX PA (UYEC-) UNIV EAST CAROLINA.

XX PI Nyce JW, Metzger WJ;  
XX DR WPI; 1997-051871/05.  
XX PT Treatment of airway diseases such as asthma - by topically applying  
XX PT adenosine-free antisense oligo:nucleotide to airway epithelium of  
XX PT subject.  
XX PS Claim 5; Page 37; 71pp; English.  
XX CC A method for treating airway disease in a subject has been produced,  
CC which involves the topical administration of an essentially adenosine  
CC free antisense oligonucleotide (ON) to the airway epithelium of the  
CC subject. The present sequence is an antisense oligonucleotide HSTNFAAS4  
CC specific for the human tumour necrosis factor alpha. The method can be  
CC used to treat airway diseases such as cystic fibrosis, asthma, chronic  
CC obstructive pulmonary disease, bronchitis and other airway diseases  
CC characterised by an inflammatory response. By eliminating adenosine from  
CC the antisense ON, its liberation upon antisense degradation is prevented,  
CC thereby preventing adenosine- induced bronchoconstriction in patients  
CC with hyper-reactive airways  
XX SQ Sequence 20 BP; 0 A; 9 C; 6 G; 5 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 478 CGGCCGCCAGCCAGGAGG 497  
Db 20 CGGCCGCCAGGGAAGAGG 1  
RESULT 4892  
AAT48467/c  
ID AAT48467 standard; DNA; 20 BP.  
XX AC AAT48467;  
XX DT 12-APR-1997 (first entry)  
XX DE Third-strand oligonucleotide purine motif for TDR.  
XX KW Haemoglobinopathy; sickle cell anaemia; haemoglobin; beta-globin; HbS;  
XX KW HbA; gene therapy; triple helix; triplex; psoralen; mutagen;  
XX KW targeted DNA replacement; TDR; homologous recombination; ss.  
XX OS Synthetic.  
XX FH Key Location/Qualifiers  
FT misc\_difference 2 /\*tag= a  
FT /note= "psoralen attachment site"  
XX PN WO9640271-A1.  
XX PD 19-DEC-1996.  
XX PF 06-JUN-1996; 96WO-US009430.  
XX PR 07-JUN-1995; 95US-00473845.  
XX PA (UYVA ) UNIV YALE.  
XX PI Glazer PM;  
XX DR WPI; 1997-099895/09.  
XX PT Repairing mutation(s) in haemoglobin by targeted mutagenesis or  
XX PT homologous recombination - mediated by a triplex forming  
XX PT oligo:nucleotide, opt. carrying a mutagen, partic. for treatment of  
XX PT sickle cell anaemia or thalassemia.

XX Claim 35; Page 46; 70pp; English.

PS Third-strand oligonucleotides (AAT48467-70) bind to a purine-rich region

XX (see also AAT48455) located at position 2655 in the beta-globin gene (see

CC also AAT48454). They can be utilised in a targetted DNA replacement (TDR)

CC method to correct a mutation that leads to sickle cell anaemia. In TDR, a

CC third-strand oligonucleotide is targetted to a binding region in the

CC gene, where it induces DNA damage. This stimulates homologous

CC recombination with an introduced donor nucleic acid strand. TDR is highly

CC specific and, since the corrected gene is in its native chromosome, the

CC cure is permanent. The purine motif given in AAT48467 employs parallel

CC polarity, which is preferred because the target is A-rich

XX Sequence 20 BP; 13 A; 0 C; 7 G; 0 T; 0 U; 0 Other;

SQ Query Match 0.5%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 4.5e+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 2155 TTTTTCCTCTCTTTT 2174

DB 20 TTCTTCCCTCTCTTCT 1

RESULT 4893

AAT68337

ID AAT68337 standard; DNA; 20 BP.

XX AAT68337;

AC AAT68337;

XX 11-AUG-1997 (first entry)

DT Loci-specific primer for assessing integrity of human Y chromosome.

XX Y chromosome; integrity; chromosome locus; primer; amplification; PCR;

KW polymerase chain reaction; fertility; azoospermia; oligospermia;

KW infertile; diagnosis; DYS209; DYF43S1; DYS210; DYS211; DYS33; DYS1; SMCX;

KW DAZ(1); DYS218; DYS219; DYS212; DYF53S1; DYS205; DYS281; MIC2; DYS201;

KW DYS241; DYS198; SRY; DYS197; DYS196; DYS240; DYS271; DYS221; KAL1B2;

KW DAZ(2); DYS224; DYS226; DYS227; DYS229; DYZ1; DYS230; DAZ(3);

KW DAZ(4); DAZ(5); SMCY; DYS217; DYS220; DYS223; DYS7; DYS237; DYS215; DYS7;

KW DYS237; DAZ(6); DAZ(7); DAZ(8); DAZ(9); DAZ(10); DAZ(11); YRRM1; ZFY;

KW BKM; ss.

XX Homo sapiens.

OS WO9641007-A1.

PN 19-DEC-1996.

XX 06-JUN-1996; 96WO-US009421.

XX 07-JUN-1995; 95US-00472416.

PR 18-SEP-1995; 95US-00531556.

XX (PROM-) PROMEGA CORP.

PA First MK, AgoulNIK AI, Muallem A;

PI WPI; 1997-099942/09.

XX Assessing integrity of Y chromosome - by amplification of selected human

PT chromosome loci by multiplex PCR and comparison with normal control DNA.

XX Claim 2; Page 52; 111pp; English.

PS AAT68337-T68346 are a set of primers used in a method for assessing the

XX integrity of a Y chromosome. The primers are capable of priming the

CC chromosome loci: DYS240, DYS271, DYS221, KAL1B2, DAZ(2) and MIC2. The

CC method can be used to rapidly and reproducibly assess the integrity of

CC specific regions of the Y chromosome that are associated with male

CC fertility. It can be used to assess the integrity of the Y chromosome in

CC males exhibiting azoospermia or oligospermia (no or very little

CC spermatozoa in the semen) or to assess the genotype of infants of

CC phenotypically ambiguous sexuality. The method can also be used in

CC diagnosis and quality control

XX Sequence 20 BP; 8 A; 3 C; 6 G; 3 T; 0 U; 0 Other;

SQ Query Match 0.5%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 4.5e+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1078 CTTAGTAGAAGGTGAAGCTG 1097

DB 1 CTTAGGAAAAAGTGAAGCCG 20

RESULT 4894

AAV40288

ID AAV40288 standard; DNA; 20 BP.

XX AAV40288;

AC AAV40288;

XX 13-OCT-1998 (first entry)

DT Rat insulin-like growth factor binding protein 3 PCR primer #1.

DE Rat; insulin-like growth factor binding protein; IGF; IGFBP; diabetes;

XX amytrophic lateral sclerosis; free insulin-like growth factor;

KW osteoporosis; PCR primer; ss.

XX Synthetic.

OS Rattus sp.

XX WO9829451-A1.

PN 09-JUL-1998.

XX 26-DEC-1997; 97WO-JP004881.

XX 27-DEC-1996; 96JP-00349968.

PR (DAUC ) DAIICHI PHARM CO LTD.

XX Sakano K, Higashihashi N, Hashimoto R;

PI WPI; 1998-388049/33.

XX Elevation of free insulin growth factor concentration in vivo - by

PT administration of substance which inhibits binding of factor to insulin

PT growth factor binding protein and acid-labile sub-units, for treatment of

PT diabetes and other diseases.

XX Example 2; Page 22; 67pp; Japanese.

PS A method has been developed to elevate the concentration of free insulin-

XX like growth factor (IGF) in vivo by administration of a substance which

CC is able to produce free IGF from the complex of IGF with insulin-like

CC growth factor binding protein (IGFBP) or from the triple complex of IGF,

CC IGFBP and acid-labile protein subunits (ALS) found in living tissue. The

CC substances are obtained by screening potential candidate substances in

CC vitro for their ability to free IGF from the complexes or for their

CC ability to inhibit the binding of IGF to IGFBP. The present sequence

CC represents a PCR primer for rat IGFBP-3 used in an example from the

CC present invention. Also described are: (1) the use of substances able to

CC form the IGF/IGFBP complex from the triple complex, and (2) substances

CC which bind to IGFBP but do not bind either to insulin receptors or IGF

CC receptors. All these substances can be used as the active components in

CC drug formulations. Treatment and prevention of diseases for which IGF is

CC a suitable treatment agent, such as diabetes, osteoporosis and

CC amytrophic lateral sclerosis

XX Sequence 20 BP; 2 A; 11 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 628 CGCCCTGGATCGCGGGCC 647  
Db 1 CGCCATGCATCCCGCGGCC 20

RESULT 4895  
AAV20979  
ID AAV20979 standard; DNA; 20 BP.  
XX  
AC AAV20979;  
XX  
DT 08-SEP-1998 (first entry)  
XX  
DE Human PRCC-TFE3 construct DNA PCR primer #15.  
XX  
KW PRCC; papillary renal cell carcinoma; TFE3; transcription factor;  
KW fusion protein; translocation; diagnosis; treatment; PCR primer; ss.  
XX  
OS Synthetic.  
OS Homo sapiens.  
XX  
PN WO9806871-A1.  
XX  
PD 19-FEB-1998.  
XX  
PF 13-AUG-1997; 97WO-GB002209.  
XX  
PR 13-AUG-1996; 96GB-00016986.  
XX  
PA (CANC-) CANCER RES CAMPAIGN TECHNOLOGY.  
XX  
PI Cooper C, Clark J, Shipley J;  
XX  
DR WPI; 1998-159557/14.  
XX

Diagnosing papillary renal cell carcinoma by detecting gene trans-  
location - resulting in fusion of TFE3 gene with some other gene, also  
related vectors, transformed cells, specific binding reagents, peptide(s)  
encoded by fusions and therapeutic anti-sense sequences.  
XX  
PS Disclosure; Page 33; 71pp; English.  
XX  
CC AAV20965-V20991 are PCR primers used in the construction of a novel  
CC fusion protein constructed from a papillary renal cell carcinoma (PRCC)  
CC associated protein and the transcription factor TFE3 which is used in a  
CC method for the diagnosis, prophylactic and therapeutic treatment of  
CC papillary renal cell carcinoma. The translocation t(X;1) (p11.2;q21.2)  
CC found in PRCC results in a fusion of the TFE3 gene with a new chromosome  
CC 1 gene designated PRCC (at 1q21.2), resulting in expression of a fusion  
CC protein between the N-terminus of PRCC and almost the whole of the TFE3  
CC gene. Normal TFE3 transcripts are no longer produced. Two other fusion  
CC partners for TFE3 have also been detected; NonO, from a invX (p11.2; q13-  
CC 24 or 12) translocation and the PSF splice factor gene, resulting in t(X;  
CC 1) (p11.2;p34). These trans-locations define a subgroup of PRCC generally  
CC encountered in patients younger than 25  
XX  
SQ Sequence 20 BP; 4 A; 4 C; 8 G; 4 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 2642 TGGGCTGAACCTAAGGTGA 2661  
Db 1 TGAGCTGGACCCGATGTA 20

RESULT 4896  
AAV57186/c

ID AAV57186 standard; DNA; 20 BP.  
XX  
AC AAV57186;  
XX  
DT 25-MAR-2003 (revised)  
DT 06-JAN-1999 (first entry)  
XX  
DE Human Notch-3 mutant gene primer #23.  
XX  
KW Human; Notch3; transmembrane receptor; lateral inhibition; regulation;  
KW developmental cascade; neurogenic gene; mutant; neurological disorder;  
KW cerebral autosomal dominant arteriopathy; subcortical infarct; CADASIL;  
KW leukoencephalopathy; therapy; PCR; primer; amplification; ss.  
XX  
OS Synthetic.  
OS Homo sapiens.  
XX  
PN FR2751985-A1.  
XX  
PD 06-FEB-1998.  
XX  
PF 01-AUG-1996; 96FR-00009733.  
XX  
PR 01-AUG-1996; 96FR-00009733.  
XX  
PA (INRM ) INSERM INST NAT SANTE & RECH MEDICALE.  
XX  
PI Tournier LE, Joutel A, Bousser MG, Bach JF;  
XX  
DR WPI; 1998-133137/13.  
XX  
PT Human Notch3 nucleic acids - and methods for identifying pre-disposition  
PT to cerebral autosomal dominant arteriopathy with sub-cortical infarcts  
PT and leukoencephalopathy.  
XX  
PS Example 3; Page 21; 42pp; French.  
XX  
CC Primers AAV57164-V57197 are used to detect mutations in a partial human  
CC Notch-3 gene (AAV57163). Primers AAV57186-V57187 amplify a fragment from  
CC exon N17. Notch3 is a transmembrane receptor protein involved in lateral  
CC inhibition and regulating developmental cascades of neurogenic genes.  
CC Mutated Notch3 proteins are thought to be involved in neurological  
CC disorders, especially of the cerebral autosomal dominant arteriopathy  
CC with subcortical infarcts and leukoencephalopathy (CADASIL) type.  
CC Blocking expression of a mutated Notch3 gene or by substitution therapy  
CC with non-mutated Notch3 gene or protein can be used to treat CADASIL or  
CC related disorders. (Updated on 25-MAR-2003 to correct PI field.)  
XX  
SQ Sequence 20 BP; 1 A; 8 C; 3 G; 8 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 1540 AGGAGAGTAGGGAAGGAACA 1559  
Db 20 AGGAGAGTGCACAGGAACA 1  
RESULT 4897  
AAV42472  
ID AAV42472 standard; DNA; 20 BP.  
XX  
AC AAV42472;  
XX  
DT 02-OCT-1998 (first entry)  
XX  
DE PCR primer 1 used to amplify human loci DYS240 DNA.  
XX  
KW Assay; Y chromosome; Y chromosome loci; human; male fertility; detection;  
KW deletion mutation; male infertility; PCR primer; ss.  
XX  
OS Synthetic.

OS Homo sapiens.  
XX WO9824937-A2.  
PN  
XX 11-JUN-1998.  
PD  
XX  
XX 04-DEC-1997; 97WO-US023136.  
PF  
XX  
XX 04-DEC-1996; 96US-00753979.  
PR  
XX (PROM-) PROMEGA CORP.  
PA  
XX  
XX First MK, Muallem A;  
PI  
XX  
XX WPI; 1998-333352/29.  
DR  
XX  
XX Assessing Y chromosome integrity in predicting human male infertility -  
PT by amplifying specific regions of human Y chromosome linked to normal  
PT fertility by multiplex PCR and detecting deletion mutations.  
PT  
XX  
XX Claim 2; Page 25; 47pp; English.  
PS  
XX  
XX PCR primers AAV42472-511 are used in a method for assessing the integrity  
CC of a Y chromosome. Genomic DNA, or blood, from a subject is combined with  
CC several distinct oligonucleotide primer pairs capable of simultaneously  
CC priming several human Y chromosome loci which are linked to normal  
CC fertility in human males. The present primer pair (AAV42472-73) amplify  
CC loci DYS240. The primer pairs are amplified by multiplex PCR, yielding  
CC amplified chromosomal DNA fragments which are isolated and compared with  
CC those from normal male subjects. The method is useful to detect deletion  
CC mutations on a Y chromosome which are predictive of human male  
CC infertility  
XX  
SQ Sequence 20 BP; 8 A; 3 C; 6 G; 3 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 1078 CTTAGTAGAAGGTGAAGCTG 1097  
Db  
1 CTTAGGAAAAGTGAAGCCG 20  
  
RESULT 4898  
AAV35081/c  
ID AAV35081 standard; DNA; 20 BP.  
XX  
XX AAV35081;  
AC  
XX  
XX 28-AUG-1998 (first entry)  
DT  
XX  
XX Antisense MDR1 oligonucleotide #21.  
DE  
XX P-glycoprotein; multiple drug resistance; MDR; cellular uptake; cancer;  
KW gene expression; chemotherapy; treatment; hyper-proliferative disease;  
KW primer; ss.  
KW  
XX  
XX Synthetic.  
OS  
XX WO9814615-A1.  
PN  
XX  
XX 09-APR-1998.  
PD  
XX  
XX 01-OCT-1997; 97WO-US017800.  
PF  
XX  
XX 04-OCT-1996; 96US-00731199.  
PR  
XX  
XX (ISIS-) ISIS PHARM INC.  
PA  
XX  
XX Dean NM, Manoharan M;  
PI  
XX  
XX WPI; 1998-240109/21.  
DR

XX Anti-sense oligo:nucleotide(s) targetted to multiple drug resistance gene  
PT - are modified by lipophilic substituent, on sugar and/or with non-  
PT natural linkages, used to improve activity of anti-proliferative agents  
PT against tumours.  
PT  
XX  
PS Example 1; Page 21; 64pp; English.  
XX  
XX AAV35061-V35101 are primers which have a sequence complementary to the  
CC translation initiation or termination region of a nucleic acid encoding a  
CC P-glycoprotein associated with multiple drug resistance (MDR) and  
CC inhibits expression of the glycoprotein. These primers are composed of 8-  
CC 30 covalently linked nucleotides and includes at least 1 of the  
CC following, a 2'-modification, a lipophilic group (LG) that improves  
CC cellular uptake, and at least 1 covalent link that is a phosphorothioate,  
CC phospho di- or tri-ester, methylphosphonate, methylene (methylimino),  
CC morpholino, polyamide, short chain alkyl or heteroatomic inter-sugar  
CC link, or cycloalkyl or heterocyclic inter-sugar link. The primers are  
CC used to modulate human MDR gene expression in cells and tissues, i.e. to  
CC improve chemotherapeutic treatment of an animal with hyper-proliferative  
CC disease, particularly cancer, to prevent development of MDR and to re-  
CC sensitise an animal that has developed MDR to a chemotherapeutic agent  
XX  
SQ Sequence 20 BP; 7 A; 0 C; 3 G; 10 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 2756 TGTATAATAAAAGTATTCTT 2775  
Db  
20 TCTATAATAAAACTAAACTT 1  
  
RESULT 4899  
AAV48864/c  
ID AAV48864 standard; DNA; 20 BP.  
XX  
XX AAV48864;  
AC  
XX  
XX 15-OCT-1998 (first entry)  
DT  
XX  
XX ErbB-2 gene antisense oligonucleotide ErbB-2-N-73.  
DE  
XX ErbB-2; antisense oligonucleotide; modulate; gene expression; ss.  
KW  
XX  
XX Synthetic.  
OS  
XX Homo sapiens.  
OS  
XX EP856579-A1.  
PN  
XX  
XX 05-AUG-1998.  
PD  
XX  
XX 31-JAN-1997; 97EP-00101531.  
PF  
XX  
XX 31-JAN-1997; 97EP-00101531.  
PR  
XX  
XX (BIOG-) BIOGNOSTIK GES BIOMOLEKULARE DIAGNOSTIK.  
PA  
XX  
XX Schlingensiepen K, Brysch W;  
PI  
XX  
XX WPI; 1998-400910/35.  
DR  
XX  
XX Preparation of antisense oligo:nucleotide(s) which lack long runs of  
PT consecutive guanosine or inosine - and have specific ratio of residues  
PT able to form two or three hydrogen bonds, have greater activity and  
PT reduced toxicity, used therapeutically or to modulate growth of cells in  
PT culture.  
PT  
XX  
XX Example 4; Fig 6d; 286pp; English.  
PS  
XX  
XX AAV48709-886 represent antisense oligonucleotides directed against the  
CC ErbB-2 gene. Of these, only oligonucleotides AAV48709-91 resulted in



CC significant reduction in ErbB-2 protein expression, while  
CC oligonucleotides AAV48792-886 had little effect. The oligonucleotides  
CC exemplify the invention. The specification describes oligonucleotides  
CC that contain 8-30 nucleotides, which contain at most 8 nucleotides that  
CC can each form three hydrogen bonds to cytosine; do not contain four  
CC consecutive nucleotides able to form three H-bonds each to four  
CC consecutive cytosines; do not contain two sequences of three consecutive  
CC nucleotides each able to form three H-bonds to three consecutive  
CC cytosines, and the ratio between residues able to form two H-bonds each  
CC (2R) or three such bonds (3R) is given by 2R/3R = 0.33-0.72. The  
CC oligonucleotides are used to modulate expression of genes, particularly  
CC the genes for p53, ErbB-2, junB, junD, TGF-beta 1 or beta 2 to control  
CC proliferation of primary cell cultures (e.g. bone marrow stem, liver or  
CC kidney cells, osteoclasts, osteoblasts and/or keratinocytes). The  
CC oligonucleotides can also be used to analyse function of proteins (by  
CC altering their expression or activity) and therapeutically, e.g. in cases  
CC of cancer or (targeting TGF) for stimulating the immune system  
XX  
SQ Sequence 20 BP; 16 A; 2 C; 1 G; 1 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 2161 TCTCTTTT TTTT TTTT TTTT TTTT 2180  
Db | | | | | | | | | | | | | | | | | | | |  
20 TTTACTTT TTTT TTTT TTTT TTTT TTTT 1

RESULT 4900  
AAV48673/c  
ID AAV48673 standard; DNA; 20 BP.

AC AAV48673;  
XX  
DT 15-OCT-1998 (first entry)  
XX  
DE junB gene antisense oligonucleotide JunB-T-2.

XX junB; junD; antisense oligonucleotide; modulate; gene expression; ss.

XX Synthetic.  
OS Homo sapiens.  
XX EP856579-A1.

XX 05-AUG-1998.

XX 31-JAN-1997; 97EP-00101531.

XX 31-JAN-1997; 97EP-00101531.

XX (BIOG-) BIOGNOSTIK GES BIOMOLEKULARE DIAGNOSTIK.

XX Schlingensiepen K, Brysch W;

XX WPI; 1998-400910/35.

XX Preparation of antisense oligo:nucleotide(s) which lack long runs of  
PT consecutive guanosine or inosine - and have specific ratio of residues  
PT able to form two or three hydrogen bonds, have greater activity and  
PT reduced toxicity, used therapeutically or to modulate growth of cells in  
PT culture.

XX Example 3; Fig 5c; 286pp; English.

XX AAV48564-708 represent antisense oligonucleotides directed against the  
CC junB and junD genes. Of these, only oligonucleotides AAV48565-614  
CC resulted in effective downregulation of negative growth control by JunB  
CC or JunD, while AAV48615-708 had little effect. The oligonucleotides  
CC exemplify the invention. The specification describes oligonucleotides  
CC that contain 8-30 nucleotides, which contain at most 8 nucleotides that  
CC can each form three hydrogen bonds to cytosine; do not contain four

CC consecutive nucleotides able to form three H-bonds each to four  
CC consecutive cytosines; do not contain two sequences of three consecutive  
CC nucleotides each able to form three H-bonds to three consecutive  
CC cytosines, and the ratio between residues able to form two H-bonds each  
CC (2R) or three such bonds (3R) is given by 2R/3R = 0.33-0.72. The  
CC oligonucleotides are used to modulate expression of genes, particularly  
CC the genes for p53, ErbB-2, junB, junD, TGF-beta 1 or beta 2 to control  
CC proliferation of primary cell cultures (e.g. bone marrow stem, liver or  
CC kidney cells, osteoclasts, osteoblasts and/or keratinocytes). The  
CC oligonucleotides can also be used to analyse function of proteins (by  
CC altering their expression or activity) and therapeutically, e.g. in cases  
CC of cancer or (targeting TGF) for stimulating the immune system  
XX  
SQ Sequence 20 BP; 1 A; 4 C; 13 G; 2 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 283 CTACAGCCCGCGCCACCCC 302  
Db | | | | | | | | | | | | | | | | | | | |  
20 CTACCGCGCGCGCCAGCCC 1

RESULT 4901  
AAV70022  
ID AAV70022 standard; DNA; 20 BP.

XX AAV70022;

XX 04-FEB-1999 (first entry)

XX Mouse c-Fos protein antisense oligonucleotide #67.

XX Mouse; c-fos; c-jun; activating protein 1; AP-1; diagnosis; metastasis;  
KW antisense oligonucleotide; phosphorothioate; regulation;  
KW malignant tumour; cell cycle expression; hyperproliferative disease; ss.

XX Synthetic.  
OS Mus sp.

XX Key Location/Qualifiers  
FT modified\_base 1..20  
FT /\*tag= a  
FT /note= "phosphorothioate linkages"

XX WO9846272-A1.

XX 22-OCT-1998.

XX 14-APR-1998; 98WO-US007386.

XX 14-APR-1997; 97US-00837201.

XX (ISIS-) ISIS PHARM INC.

XX Dean NM, Mckay R, Miraglia L, Baker B;

XX WPI; 1998-609906/51.

XX Antisense oligonucleotides regulating Activating Protein 1 subunits -  
PT hybridise with c-fos and c-jun mRNA, used for regulating metastasis, cell  
PT cycle expression and hyperproliferative disease.

XX Example 7; Page 53; 120pp; English.

XX AAV70009 to AAV70024 represent antisense oligonucleotides which are  
CC specifically hybridisable with a region of a nucleic acid encoding mouse  
CC c-Fos protein. The antisense compound regulates the expression of the c-  
CC Fos protein. The present invention also describes antisense  
CC oligonucleotides which regulate the c-Jun protein. The antisense  
CC oligonucleotides are used for the diagnosis and treatment of diseases or  
CC disorders associated with Activating Protein 1 expression, of which c-Fos

CC and c-Jun are subunits. The antisense oligonucleotides are used in  
CC compositions as c-Fos and/or c-Jun together with a carrier and a  
CC chemotherapeutic agent. They are used to regulate the expression of c-Fos  
CC or c-Jun in cells or tissues, preferably by inhibiting metastasis. They  
CC also regulate cell cycle expression and can be used to treat an animal  
CC with, or being prone to, a hyperproliferative disease  
XX  
SQ Sequence 20 BP; 1 A; 7 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 632 CTGGATCCGCGGCGCTGGC 651  
Db 1 CTGGATCCGCGCTGCCTGC 20

RESULT 4902  
AAV57115/C  
ID AAV57115 standard; DNA; 20 BP.  
XX AAV57115;  
AC AAV57115;  
XX 25-MAR-2003 (revised)  
DT 21-DEC-1998 (first entry)  
XX Human Notch3 mutant gene primer N7F.  
DE  
XX Human; Notch3; transmembrane receptor; lateral inhibition; regulation;  
KW developmental cascade; neurogenic gene; mutant; neurological disorder;  
KW cerebral autosomal dominant arteriopathy; subcortical infarct; CADASIL;  
KW leukoencephalopathy; therapy; PCR; primer; amplification; ss.  
XX  
OS Synthetic.  
OS Homo sapiens.  
XX  
PN FR2751986-A1.  
XX 06-FEB-1998.  
PD 16-APR-1997; 97FR-00004680.  
FF 01-AUG-1996; 96FR-00009733.  
XX (INRM ) INSERM INST NAT SANTE & RECH MEDICALE.  
XX Tournier LE, Joutel A, Bousser MG, Bach JF;  
PI WPI; 1998-133138/13.  
XX Human Notch3 nucleic acids - and methods for identifying pre-disposition  
PT to cerebral autosomal dominant arteriopathy with sub-cortical infarcts  
PT and leukoencephalopathy.  
XX

PS Example 3; Page 24; 45pp; French.  
XX Primers AAV57066-V57162 are used to detect mutations in the human Notch3  
CC gene (AAV57001). Primers AAV57115-V57116 amplify a 249 bp fragment from  
CC the EGF27-28 domain sequences found in exon 20. Notch3 is a transmembrane  
CC receptor protein involved in lateral inhibition and regulating  
CC developmental cascades of neurogenic genes. Mutated Notch3 proteins are  
CC thought to be involved in neurological disorders, especially of the  
CC cerebral autosomal dominant arteriopathy with subcortical infarcts and  
CC leukoencephalopathy (CADASIL) type. Blocking expression of a mutated  
CC Notch3 gene or by substitution therapy with non-mutated Notch3 gene or  
CC protein can be used to treat CADASIL or related disorders. (Updated on 25  
CC -MAR-2003 to correct PI field.)  
XX

SQ Sequence 20 BP; 1 A; 8 C; 3 G; 8 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 1540 AGGAGAGTAGGAAGGAACA 1559  
Db 20 AGGAGAGTGGCACAGGAACA 1

RESULT 4903  
AAV42066  
ID AAV42066 standard; DNA; 20 BP.  
XX AAV42066;  
AC AAV42066;  
XX 26-OCT-1998 (first entry)  
DT Mouse alpha 3 connexin wild-type gene 3' PCR primer.  
XX Alpha 3 connexin; A3C gene; mouse; lens; crystallin; cataract;  
KW knockout animal; PCR; primer; ss.  
XX  
OS Synthetic.  
OS Mus sp.  
XX WO9830677-A1.  
PN 16-JUL-1998.  
PD 09-JAN-1998; 98WO-US0000340.  
PF 10-JAN-1997; 97US-0034737P.  
PR 15-MAY-1997; 97US-0046518P.  
XX (SCRI ) SCRIPPS RES INST.  
PA  
XX Gilula NB, Gong X, Kumar NM;  
PI WPI; 1998-413684/35.  
XX

Disrupted alpha3 connexin genes - used to produce transgenic animals,  
useful for the study, prevention and treatment of cataracts.

Example 1; Page 30; 73pp; English.

3 Primers were used to examine wild-type or mutant alleles of the alpha 3  
connexin gene (see AAV32687) in embryonic stem (ES) cells of putative  
alpha 3 connexin gene knockout mice. The 5' primer (see AAV42065) was  
used with a 3' primer (AAV42066) for detecting the wild-type allele or  
with a 3' primer (see AAV42067) from the lacZ gene sequence to detect the  
alpha 3 gene disrupted allele. The absence of functional alpha 3 connexin  
protein (see AAV49009) in the knockout mice leads to age-related cataract  
formation. Such animals, or isolated lenses cultured in vitro, can be  
used in methods to identify compounds that affect cataract growth

Sequence 20 BP; 4 A; 4 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1114 CTTTGCCCTATGCTGTGAAG 1133  
Db 1 CTTTGCCGATGACTGTAGAG 20

RESULT 4904  
AAV79995  
ID AAV79995 standard; DNA; 20 BP.  
XX AAV79995;  
AC AAV79995;  
XX 24-FEB-1999 (first entry)  
DT  
XX BMP-1A DNA amplifying primer.  
DE

XX Transgenic; osteogenic; core binding factor; CBFA1/PEBP2-alpha-A;  
KW polyoma enhancer binding protein; runt; osteoblast; variant; BMP;  
KW PCR primer; ss.  
XX Synthetic.  
OS  
XX JP10309148-A.  
PN  
XX  
XX 24-NOV-1998.  
PD  
XX  
XX 11-SEP-1997; 97JP-00247346.  
PF  
XX  
XX 10-MAR-1997; 97JP-00074453.  
PR  
XX  
XX (KISH/) KISHIMOTO C.  
PA  
XX  
XX WPI; 1999-063649/06.  
DR  
XX  
XX Transgenic animal with no osteogenic property - has introduced variation  
PT in gene encoding core binding factor/polyoma enhancer binding protein.  
PT  
XX  
XX Example 10; Page 7; 19pp; Japanese.  
PS  
XX  
XX The invention provides a transgenic animal devoid of osteogenic property.  
CC The transgenic animal has an introduced variation in a gene encoding for  
CC core binding factor/polyoma enhancer binding protein (CBFA1/PEBP2-alpha-  
CC A), particularly in runt region DNA, especially prepared by introduction  
CC of a variation devoid of at least a part of gene encoding CBFA1/PEBP2-  
CC alpha-A, leading to a disturbance in differentiation and maturation of  
CC osteoblast cells. The transgenic animal can be prepared by introducing a  
CC variant gene encoding for CBFA1/PEBP2-alpha-A. The animal can be used to  
CC elucidate the in vivo mechanism of CBFA1/PEBP2-alpha-A. Sequences  
CC AAV79975 to AAV80010 represent PCR primers used during the course of the  
CC invention  
XX  
SQ Sequence 20 BP; 2 A; 5 C; 5 G; 8 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 1112 GACTTGCTATGCTGTGA 1131  
Db 1 GGCCTGCTTATCTCTGTGA 20  
RESULT 4905  
AAZ37685/c  
ID AAZ37685 standard; DNA; 20 BP.  
XX  
AC AAZ37685;  
XX  
DT 07-JAN-2000 (first entry)  
DE Human mdm2 phosphorothioate oligodeoxynucleotide #215.  
XX  
KW Human mdm2 gene; proliferation; tumour; phosphorothioate; p53; cancer;  
KW antisense; modulation; oligonucleotide; expression; inhibition;  
KW hyperproliferation; blood cancer; brain cancer; breast cancer;  
KW lung cancer; soft tissue cancer; psoriasis; fibrosis; atherosclerosis;  
KW restenosis; ss.  
XX  
OS Synthetic.  
OS Homo sapiens.  
XX  
PN WO9949065-A1.  
XX  
XX 30-SEP-1999.  
PD  
XX  
XX 26-MAR-1999; 99WO-US006702.  
PF  
XX  
XX 26-MAR-1998; 98US-00048810.  
PR

XX (ISIS-) ISIS PHARM INC.  
PA  
XX Miraglia LJ, Nero P, Graham MJ, Monia BP, Cowser LM;  
PI  
XX WPI; 1999-610754/52.  
DR  
XX New antisense compounds used to treat eg. hyperproliferative conditions.  
XX  
PT Example 9; Page 53; 157pp; English.  
PS  
XX  
XX AAZ37473-Z37738 represent human mdm2 phosphorothioate oligonucleotides.  
CC AAZ37471, AAZ37472, AAZ37739, AAZ37740 and AAZ37741 are used in the  
CC exemplification of the present invention. The present invention describes  
CC novel nucleotide antisense compounds, targeted to the 5' untranslated,  
CC translation termination codon, or 3' untranslated region of a nucleic  
CC acid encoding human mdm2, that modulates expression of human mdm2. The  
CC oligonucleotides mediate their effect by antisense inhibition of  
CC hyperproliferative gene expression. The antisense compound is used to  
CC treat an animal having a disease or condition associated with mdm2,  
CC particularly a hyperproliferative condition, more particularly cancer,  
CC especially of the blood, brain, breast, lung or soft tissue, or  
CC psoriasis, fibrosis, atherosclerosis or restenosis  
XX  
SQ Sequence 20 BP; 8 A; 1 C; 3 G; 8 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 2520 TTTATTTCATATATATACAGG 2539  
Db 20 TTTATTTCATATATATCAAG 1  
RESULT 4906  
AAZ21637/c  
ID AAX21637 standard; DNA; 20 BP.  
XX  
AC AAX21637;  
XX  
DT 14-MAY-1999 (first entry)  
DE Human N-ras specific antisense oligo ISIS #14679.  
XX  
DE Human; N-ras; inhibition; pharmaceutical; modulation; cancer; oncogene;  
KW diagnostic; therapeutic; tumour; antisense; ss.  
KW  
XX Synthetic.  
OS Homo sapiens.  
XX  
PN WO9902732-A1.  
XX  
PD 21-JAN-1999.  
XX  
XX 06-JUL-1998; 98WO-US013966.  
PF  
XX  
XX 08-JUL-1997; 97US-00889296.  
PR  
XX (ISIS-) ISIS PHARM INC.  
PA  
XX Monia BP, Cowser LM, Manoharan M;  
PI  
XX WPI; 1999-120932/10.  
DR  
XX New oligonucleotide targeting human N-ras nucleic acid - is capable of  
PT inhibiting human N-ras expression, useful for preventing or treating  
PT conditions arising from the activation of a human N-ras oncogene.  
PT  
XX  
PS Disclosure; Page 40; 97pp; English.  
XX  
CC The invention relates to oligonucleotides, which target a nucleic acid  
CC encoding human N-ras, and are capable of inhibiting human N-ras

CC expression. The antisense oligonucleotides form a pharmaceutical  
CC composition, which is useful for modulating the expression of human N-  
CC ras, inhibiting the proliferation of cancer cells, and preventing or  
CC treating conditions arising from the activation of a human N-ras  
CC oncogene. The oligonucleotides are also useful in diagnostics,  
CC therapeutics, and as research reagents and kits. The oligonucleotides  
CC enable the specific modulation of activated human N-ras expression, which  
CC is associated with tumour formation. Sequences AAX21634-654 represent  
CC antisense oligonucleotides targeted to human N-ras  
XX  
SQ Sequence 20 BP; 6 A; 6 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 69 GACGCCTGGTCACCGTGACC 88  
Db 20 GCCGCCTGGTTACTGTGTCC 1

RESULT 4907  
AAX57000/c  
ID AAX57000 standard; DNA; 20 BP.

XX AAX57000;

DT 16-JUL-1999 (first entry)

XX Ras gene modulating liposomal entrapped oligonucleotide primer 44.

DE Ras gene; modulator; liposome; primer; antisense; anticancer; inhibition;  
XX cell growth inhibitor; treatment; cancer; ras protein; ss.

OS Synthetic.

XX WO9922772-A1.

XX 14-MAY-1999.

XX 28-OCT-1998; 98WO-US022821.

XX 31-OCT-1997; 97US-00961469.

XX (ISIS-) ISIS PHARM INC.

XX Hardee GE, Geary RS, Levin A, Templin MV, Howard R, Mehta RC;

XX WPI; 1999-313181/26.

XX Liposome-encapsulated oligonucleotides useful for treating or preventing  
XX cancers associated with ras gene activation.

PS Example 1; Page 115; 120pp; English.

XX This invention describes novel compositions comprising oligonucleotides  
CC (AAX56957-X57017), entrapped within liposomes, that hybridize  
CC specifically to a target DNA or mRNA which encodes a mutant or wild-type  
CC ras protein. The products of the invention have anticancer activity and  
CC specifically bring about the antisense inhibition of ras genes or mRNA.  
CC The products of the invention are used to modulate expression of a ras  
CC gene in cells, tissue, organs or organisms, particularly to inhibit cell  
CC growth and especially to treat or prevent cancers associated with  
CC activation of a ras gene. Encapsulating the oligonucleotide reduces the  
CC rate at which it is cleared from the blood when compared with non-  
CC encapsulated material, and the oligonucleotides become distributed to  
CC practically all parts of the body  
XX

SQ Sequence 20 BP; 6 A; 6 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 69 GACGCCTGGTCACCGTGACC 88  
Db 20 GCCGCCTGGTTACTGTGTCC 1

RESULT 4908  
AAZ31287/c  
ID AAZ31287 standard; DNA; 20 BP.

XX AAZ31287;

XX 24-JAN-2000 (first entry)

XX CCR5 gene inhibiting antisense oligo AS(s)-44.

DE HIV cofactor inhibitor; HIV infection; CXCR4 gene; CCR5 gene;  
XX drug composition; antisense; ss.

OS Synthetic.

XX WO9951751-A1.

XX 14-OCT-1999.

XX 01-APR-1999; 99WO-JP001722.

XX 02-APR-1998; 98JP-00125452.

XX (MARI-) MARINE BIO CO LTD.

XX Takaku H, Yamamoto N, Kimura T, Takai K, Wada A;

XX WPI; 1999-620207/53.

XX Antisense oligonucleotide-based HIV cofactor inhibitors, as drug  
XX compositions for treatment of HIV infection.

PS Claim 6; Page 16; 59pp; Japanese.

XX The invention provides HIV cofactor inhibitors that contain  
CC oligonucleotides with a base sequence complementary to the CXCR4 or CCR5  
CC genes. Such inhibitors can be formulated into drug compositions for  
CC prevention or treatment of HIV infection, with inhibition of expression  
CC of CXCR4 or/and CCR5 gene. Sequences AAZ31244-306 represent antisense  
CC oligonucleotides to the CCR5 gene  
XX

SQ Sequence 20 BP; 13 A; 2 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 2149 GATTGATTTTCTCTCTT 2168  
Db 20 GATTGTTTATTTCTCTCT 1

RESULT 4909  
AAZ31349

ID AAZ31349 standard; DNA; 20 BP.

XX AAZ31349;

XX 24-JAN-2000 (first entry)

XX CXCR4 gene inhibiting antisense oligo AS(s)-106.

DE HIV cofactor inhibitor; HIV infection; CXCR4 gene; CCR5 gene;  
XX drug composition; antisense; ss.

OS Synthetic.



PN WO9951751-A1.  
XX 14-OCT-1999.  
PD  
XX 01-APR-1999; 99WO-JP001722.  
PF  
XX 02-APR-1998; 98JP-00125452.  
PR  
XX (MARI-) MARINE BIO CO LTD.  
PA  
XX Takaku H, Yamamoto N, Kimura T, Takai K, Wada A;  
PI  
XX WPI; 1999-620207/53.  
DR  
XX Antisense oligonucleotide-based HIV cofactor inhibitors, as drug  
PT compositions for treatment of HIV infection.  
PT  
XX Claim 6; Page 18; 59pp; Japanese.  
PS  
XX The invention provides HIV cofactor inhibitors that contain  
CC oligonucleotides with a base sequence complementary to the CXCR4 or CCR5  
CC genes. Such inhibitors can be formulated into drug compositions for  
CC prevention or treatment of HIV infection, with inhibition of expression  
CC of CXCR4 or/and CCR5 gene. Sequences AAZ31307-362 represent antisense  
CC oligonucleotides to the CXCR4 gene  
CC  
XX Sequence 20 BP; 3 A; 8 C; 2 G; 7 T; 0 U; 0 Other;  
SQ  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 1776 TTTTTCGAACCCCATCTCTT 1795  
DB 1 TTGCTCGAACCCCATCTCT 20  
RESULT 4910  
AA33699/C  
ID AAX33699 standard; DNA; 20 BP.  
XX  
AC AAX33699;  
XX  
DT 25-JUN-1999 (first entry)  
XX  
DE DNA tandem nucleotide repeat locus PCR primer SEQ ID NO 29.  
XX  
KW DNA tandem nucleotide repeat locus; human; DTNR allele; genetic mapping;  
KW genetic identity detection; forensic identification; paternity testing;  
KW PCR primer; ss.  
XX  
OS Synthetic.  
OS Homo sapiens.  
XX  
PN WO9914375-A2.  
XX  
PD 25-MAR-1999.  
XX  
PF 18-SEP-1998; 98WO-US019578.  
XX  
PR 19-SEP-1997; 97US-0059415P.  
XX  
PA (GENE-) GENETRACE SYSTEMS INC.  
XX  
PI Butler JM, Li J, Monforte J, Becker CA;  
XX WPI; 1999-229554/19.  
XX  
PT Analysis of DNA tandem nucleotide repeat alleles by extending a target  
PT nucleic acid using primers and analysis by mass spectrometry.  
XX  
PS Claim 99; Page 25; 136pp; English.  
XX

CC This sequence represents a PCR primer for a DNA tandem nucleotide repeat  
CC (DTNR) locus that can be used in the method of the invention. The method  
CC is for analysing DTNR alleles in a target nucleic acid, and comprises  
CC extending the target nucleic acid using primers complementary to  
CC sequences flanking the repeat and analysis by mass spectrometry. The  
CC products and methods can be used for genetic identity detection including  
CC forensic identification and paternity testing as well as genetic mapping.  
CC The use of mass spectrometry for characterising DTNRs provides for high  
CC speed of analysis (a few seconds per sample) and accurate direct mass  
CC measurements  
XX  
SQ Sequence 20 BP; 1 A; 10 C; 1 G; 8 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 1542 GAGAGTAGGGAAGGAACAGG 1561  
DB 20 GGAATAAGGGAGGAACAGG 1  
RESULT 4911  
AA34534/C  
ID AAX54534 standard; DNA; 20 BP.  
XX  
AC AAX54534;  
XX  
DT 05-JUL-1999 (first entry)  
XX  
DE Tumour necrosis factor alpha antisense oligonucleotide.  
XX  
KW Antisense oligonucleotide; multiple target; antisense treatment;  
KW impaired respiration; inflammation; lung disease;  
KW pulmonary vasoconstriction; inflammation; allergic rhinitis;  
KW acute asthma; allergy; asthma; impeded respiration;  
KW respiratory distress syndrome; pain; cystic fibrosis;  
KW pulmonary hypertension; pulmonary vasoconstriction; emphysema;  
KW chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma;  
KW colon cancer; breast cancer; lung cancer; pancreatic cancer;  
KW hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;  
KW prostate cancer; ss.  
XX  
OS Synthetic.  
XX  
PN WO9913886-A1.  
XX  
PD 25-MAR-1999.  
XX  
PF 17-SEP-1998; 98WO-US019419.  
XX  
PR 17-SEP-1997; 97US-0059160P.  
PR 09-JUN-1998; 98US-00093972.  
XX  
PA (UYEC-) UNIV EAST CAROLINA.  
XX  
PI Nyce JW;  
XX  
DR WPI; 1999-229400/19.  
XX  
PT New antisense oligonucleotides used in treatment of, e.g. pulmonary  
PT vasoconstriction.  
XX  
PS Disclosure; Page 57; 120pp; English.  
XX  
CC The specification describes antisense oligonucleotides (AAX52869-X55271)  
CC directed against at least 2 mRNAs selected from target genes, coding and  
CC non-coding regions of RNAs corresponding to target genes, gene initiation  
CC codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'-  
CC -end and the juxta-section between coding and non-coding regions and all  
CC segments of RNAs encoding proteins associated with one or more diseases,  
CC conditions or mixtures. The antisense oligonucleotides may be derived  
CC from sequences AAX55272-74. These multiple target oligonucleotides

CC (specifically AAX55180-271) can be used for the antisense treatment of  
CC diseases and conditions. Typical diseases and conditions are those  
CC associated with impaired respiration and inflammation, including lung  
CC diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis,  
CC acute asthma, allergies, asthma, impeded respiration, respiratory  
CC distress syndrome, pain, cystic fibrosis, pulmonary hypertension,  
CC pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary  
CC disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g.  
CC colon cancer, breast cancer, lung cancer, pancreatic cancer,  
CC hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, as  
CC well as all types of cancers which may metastasize or have metastasized  
CC to the lungs, including breast and prostate cancer  
XX  
SQ Sequence 20 BP; 0 A; 9 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 478 CGGCCGCCAGAGCCAGGAGG 497  
||||| ||||| |||||  
DB 20 CGGCCGCCAGAGGGAAGAGG 1

RESULT 4912  
AAX33260/c  
ID AAX33260 standard; DNA; 20 BP.

XX AAX33260;

XX 30-JUN-1999 (first entry)

DE PEBP2 alpha A gene expression regulating DNA PCR primer SEQ ID NO:17.

XX PEBP2 alpha A gene; expression; regulation; bone disease; osteoporosis;  
KW PCR primer; ss.

XX Synthetic.

PN WO9911787-A1.

XX 11-MAR-1999.

PF 02-SEP-1998; 98WO-JP003920.

XX 02-SEP-1997; 97JP-00254250.

PR 15-OCT-1997; 97JP-00299407.

PR 08-APR-1998; 98JP-00114135.

XX (SUMU) SUMITOMO PHARM CO LTD.

XX Harada H, Fujiwara M, Tagashira S, Ogawa S, Katsumata T;  
PI Nakatsuka M;

XX WPI; 1999-243621/20.

XX DNA regulating expression of PEBP2 alphaA gene to produce regulator  
PT protein, useful as promoter for prevention of and treatment of bone  
PT diseases e.g. osteoporosis.

XX Example 2; Page 29; 118pp; Japanese.

XX The present invention describes DNA which participates in the regulation  
CC of expression of PEBP2 alpha A gene. The DNA produces a regulator protein  
CC with the activity of promoting bone formation and can serve as a promoter  
CC for prevention and treatment of bone diseases including osteoporosis. The  
CC present sequence represents a PCR primer used in an example from the  
CC present invention  
XX

SQ Sequence 20 BP; 4 A; 7 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 545 CACCTCTCCGGCTGGAGGC 564  
||||| ||||| |||||

DB 20 CATCTTGCCGGCTGCAGGC 1

RESULT 4913

AAZ01809

ID AAZ01809 standard; DNA; 20 BP.

XX AAZ01809;

XX 07-OCT-1999 (first entry)

DE PCR primer used to amplify an ORF of Chlamydia trachomatis.

XX Vaccine; eye disease; conventional trachoma; nonendemic trachoma;  
KW paratrachoma; inclusion conjunctivitis; genital disease; perihepatitis;  
KW nongonococcal urethritis; epididymitis; cervicitis; salpingitis; PCR primer;  
KW bartholinitis; pneumopathy; venereal lymphogranulomatosis; ss.

XX Synthetic.

OS Chlamydia trachomatis.

XX WO9928475-A2.

PN 10-JUN-1999.

XX 27-NOV-1998; 98WO-IB001939.

XX 28-NOV-1997; 97FR-00015041.

PR 17-DEC-1997; 97FR-00016034.

PR 04-NOV-1998; 98US-0107077P.

XX (GEST) GENSET.

XX Griffais R;

XX WPI; 1999-371125/31.

XX Genome sequence of Chlamydia trachomatis.

XX Disclosure; Page 1473; 1755pp; English.

XX PCR primers AAZ01426-Z06209 were used to amplify open reading frames  
CC (ORFs) of the genome of Chlamydia trachomatis (see AAZ01425). These ORFs  
CC encode polypeptides (see AAY36754-Y37949) which can be used as vaccines  
CC against Chlamydia trachomatis. Antisense and ribozyme sequences can also  
CC be used to control growth of the microorganism. Chlamydia trachomatis is  
CC responsible for a large number of diseases, e.g. eye diseases such as  
CC conventional trachoma, nonendemic trachoma, paratrachoma, and inclusion  
CC conjunctivitis; genital diseases such as nongonococcal urethritis,  
CC epididymitis, cervicitis, salpingitis, perihepatitis, bartholinitis;  
CC pneumopathy in breast feeding infants; and venereal lymphogranulomatosis.  
CC The polypeptides of the invention may be of use in treating these  
CC diseases  
XX

SQ Sequence 20 BP; 3 A; 7 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 719 CTGTTGCTGCACGATCAGAC 738  
||||| ||||| |||||

DB 1 CTTTGTGCTGCACATTCGAC 20

RESULT 4914

AAZ04150

ID AAZ04150 standard; DNA; 20 BP.

XX

AC AAZ04150;  
XX  
DT 07-OCT-1999 (first entry)  
XX  
DE PCR primer used to amplify an ORF of Chlamydia trachomatis.  
XX  
KW Vaccine; eye disease; conventional trachoma; nonendemic trachoma;  
KW paratrachoma; inclusion conjunctivitis; genital disease; perihhepatitis;  
KW nongonococcal urethritis; epidymitis; cervicitis; salpingitis; PCR primer;  
KW bartholinitis; pneumopathy; venereal lymphogranulomatosis; ss.  
XX  
OS Synthetic.  
OS Chlamydia trachomatis.  
XX  
PN WO9928475-A2.  
XX  
PD 10-JUN-1999.  
XX  
PF 27-NOV-1998; 98WO-IB001939.  
XX  
PR 28-NOV-1997; 97FR-00015041.  
PR 17-DEC-1997; 97FR-00016034.  
PR 04-NOV-1998; 98US-0107077P.  
XX  
PA (GEST ) GENSET.  
XX  
XX Griffais R;  
XX  
DR WPI; 1999-371125/31.  
XX  
XX Genome sequence of Chlamydia trachomatis.  
XX  
PS Disclosure; Page 1665; 1755pp; English.  
XX  
XX PCR primers AAZ01426-Z06209 were used to amplify open reading frames  
(ORFs) of the genome of Chlamydia trachomatis (see AAZ01425). These ORFs  
encode polypeptides (see AAY36754-Y37949) which can be used as vaccines  
against Chlamydia trachomatis. Antisense and ribozyme sequences can also  
be used to control growth of the microorganism. Chlamydia trachomatis is  
responsible for a large number of diseases, e.g. eye diseases such as  
conventional trachoma, nonendemic trachoma, paratrachoma, and inclusion  
conjunctivitis; genital diseases such as nongonococcal urethritis,  
epidymitis, cervicitis, salpingitis, perihhepatitis, bartholinitis;  
pneumopathy in breast feeding infants; and venereal lymphogranulomatosis.  
The polypeptides of the invention may be of use in treating these  
diseases  
XX  
SQ Sequence 20 BP; 5 A; 5 C; 5 G; 5 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 1560 GGACTGCAAAATCCTTCTC 1579  
Db 1 GGGCTTCAAAAGCGTTCTC 20  
  
RESULT 4915  
AAZ05582  
ID AAZ05582 standard; DNA; 20 BP.  
XX  
AC AAZ05582;  
XX  
DT 07-OCT-1999 (first entry)  
XX  
DE PCR primer used to amplify an ORF of Chlamydia trachomatis.  
XX  
KW Vaccine; eye disease; conventional trachoma; nonendemic trachoma;  
KW paratrachoma; inclusion conjunctivitis; genital disease; perihhepatitis;  
KW nongonococcal urethritis; epidymitis; cervicitis; salpingitis; PCR primer;  
KW bartholinitis; pneumopathy; venereal lymphogranulomatosis; ss.  
XX

OS Synthetic.  
OS Chlamydia trachomatis.  
XX  
PN WO9928475-A2.  
XX  
PD 10-JUN-1999.  
XX  
PF 27-NOV-1998; 98WO-IB001939.  
XX  
PR 28-NOV-1997; 97FR-00015041.  
PR 17-DEC-1997; 97FR-00016034.  
PR 04-NOV-1998; 98US-0107077P.  
XX  
PA (GEST ) GENSET.  
XX  
XX Griffais R;  
XX  
DR WPI; 1999-371125/31.  
XX  
XX Genome sequence of Chlamydia trachomatis.  
XX  
PS Disclosure; Page 1782; 1755pp; English.  
XX  
XX PCR primers AAZ01426-Z06209 were used to amplify open reading frames  
(ORFs) of the genome of Chlamydia trachomatis (see AAZ01425). These ORFs  
encode polypeptides (see AAY36754-Y37949) which can be used as vaccines  
against Chlamydia trachomatis. Antisense and ribozyme sequences can also  
be used to control growth of the microorganism. Chlamydia trachomatis is  
responsible for a large number of diseases, e.g. eye diseases such as  
conventional trachoma, nonendemic trachoma, paratrachoma, and inclusion  
conjunctivitis; genital diseases such as nongonococcal urethritis,  
epidymitis, cervicitis, salpingitis, perihhepatitis, bartholinitis;  
pneumopathy in breast feeding infants; and venereal lymphogranulomatosis.  
The polypeptides of the invention may be of use in treating these  
diseases  
XX  
SQ Sequence 20 BP; 7 A; 4 C; 6 G; 3 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 1309 CTTGGAGACGACATACAGA 1328  
Db 1 CCTGGATACGACATAGAGA 20  
  
RESULT 4916  
AAZ06015  
ID AAZ06015 standard; DNA; 20 BP.  
XX  
AC AAZ06015;  
XX  
DT 07-OCT-1999 (first entry)  
XX  
DE PCR primer used to amplify an ORF of Chlamydia trachomatis.  
XX  
KW Vaccine; eye disease; conventional trachoma; nonendemic trachoma;  
KW paratrachoma; inclusion conjunctivitis; genital disease; perihhepatitis;  
KW nongonococcal urethritis; epidymitis; cervicitis; salpingitis; PCR primer;  
KW bartholinitis; pneumopathy; venereal lymphogranulomatosis; ss.  
XX  
OS Synthetic.  
OS Chlamydia trachomatis.  
XX  
PN WO9928475-A2.  
XX  
PD 10-JUN-1999.  
XX  
PF 27-NOV-1998; 98WO-IB001939.  
XX  
PR 28-NOV-1997; 97FR-00015041.  
PR 17-DEC-1997; 97FR-00016034.

PR 04-NOV-1998; 98US-0107077P.  
XX (GEST ) GENSET.  
PA Griffais R;  
XX WPI; 1999-371125/31.  
DR Genome sequence of Chlamydia trachomatis.  
XX Disclosure; Page 1818; 1755pp; English.  
XX PCR primers AAZ01426-Z06209 were used to amplify open reading frames  
CC (ORFs) of the genome of Chlamydia trachomatis (see AAZ01425). These ORFs  
CC encode polypeptides (see AAY36754-Y37949) which can be used as vaccines  
CC against Chlamydia trachomatis. Antisense and ribozyme sequences can also  
CC be used to control growth of the microorganism. Chlamydia trachomatis is  
CC responsible for a large number of diseases, e.g. eye diseases such as  
CC conventional trachoma, nonendemic trachoma, paratrachoma, and inclusion  
CC conjunctivitis; genital diseases such as nongonococcal urethritis,  
CC epididymitis, cervicitis, salpingitis, perihepatitis, bartholinitis;  
CC pneumopathy in breast feeding infants; and venereal lymphogranulomatosis.  
CC The polypeptides of the invention may be of use in treating these  
CC diseases  
XX  
SQ Sequence 20 BP; 5 A; 5 C; 5 G; 5 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 1560 GGACTGCAAAATCCTTCTC 1579  
Db 1 GGGCTCAAAAGCGTTCTC 20  
RESULT 4917  
AAZ03352  
ID AAZ03352 standard; DNA; 20 BP.  
XX  
AC AAZ03352;  
XX  
DT 07-OCT-1999 (first entry)  
XX  
DE PCR primer used to amplify an ORF of Chlamydia trachomatis.  
XX  
KW Vaccine; eye disease; conventional trachoma; nonendemic trachoma;  
KW paratrachoma; inclusion conjunctivitis; genital disease; perihepatitis;  
KW nongonococcal urethritis; epididymitis; cervicitis; salpingitis; PCR primer;  
KW bartholinitis; pneumopathy; venereal lymphogranulomatosis; ss.  
XX  
OS Synthetic.  
OS Chlamydia trachomatis.  
XX  
PN WO9928475-A2.  
XX  
PD 10-JUN-1999.  
XX  
PF 27-NOV-1998; 98WO-IB001939.  
XX  
PR 28-NOV-1997; 97FR-00015041.  
PR 17-DEC-1997; 97FR-00016034.  
PR 04-NOV-1998; 98US-0107077P.  
XX  
PA (GEST ) GENSET.  
XX  
PI Griffais R;  
XX  
DR WPI; 1999-371125/31.  
XX  
PT Genome sequence of Chlamydia trachomatis.  
XX  
PS Disclosure; Page 1599; 1755pp; English.

XX PCR primers AAZ01426-Z06209 were used to amplify open reading frames  
CC (ORFs) of the genome of Chlamydia trachomatis (see AAZ01425). These ORFs  
CC encode polypeptides (see AAY36754-Y37949) which can be used as vaccines  
CC against Chlamydia trachomatis. Antisense and ribozyme sequences can also  
CC be used to control growth of the microorganism. Chlamydia trachomatis is  
CC responsible for a large number of diseases, e.g. eye diseases such as  
CC conventional trachoma, nonendemic trachoma, paratrachoma, and inclusion  
CC conjunctivitis; genital diseases such as nongonococcal urethritis,  
CC epididymitis, cervicitis, salpingitis, perihepatitis, bartholinitis;  
CC pneumopathy in breast feeding infants; and venereal lymphogranulomatosis.  
CC The polypeptides of the invention may be of use in treating these  
CC diseases  
XX  
SQ Sequence 20 BP; 4 A; 3 C; 7 G; 6 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 1374 AGCCATCTGTGCGCGGTG 1393  
Db 1 AGGCTATCTGTGAAGCTGTG 20  
RESULT 4918  
AAZ05579  
ID AAZ05579 standard; DNA; 20 BP.  
XX  
AC AAZ05579;  
XX  
DT 07-OCT-1999 (first entry)  
XX  
DE PCR primer used to amplify an ORF of Chlamydia trachomatis.  
XX  
KW Vaccine; eye disease; conventional trachoma; nonendemic trachoma;  
KW paratrachoma; inclusion conjunctivitis; genital disease; perihepatitis;  
KW nongonococcal urethritis; epididymitis; cervicitis; salpingitis; PCR primer;  
KW bartholinitis; pneumopathy; venereal lymphogranulomatosis; ss.  
XX  
OS Synthetic.  
OS Chlamydia trachomatis.  
XX  
PN WO9928475-A2.  
XX  
PD 10-JUN-1999.  
XX  
PF 27-NOV-1998; 98WO-IB001939.  
XX  
PR 28-NOV-1997; 97FR-00015041.  
PR 17-DEC-1997; 97FR-00016034.  
PR 04-NOV-1998; 98US-0107077P.  
XX  
PA (GEST ) GENSET.  
XX  
PI Griffais R;  
XX  
DR WPI; 1999-371125/31.  
XX  
PT Genome sequence of Chlamydia trachomatis.  
XX  
PS Disclosure; Page 1782; 1755pp; English.  
XX  
CC PCR primers AAZ01426-Z06209 were used to amplify open reading frames  
CC (ORFs) of the genome of Chlamydia trachomatis (see AAZ01425). These ORFs  
CC encode polypeptides (see AAY36754-Y37949) which can be used as vaccines  
CC against Chlamydia trachomatis. Antisense and ribozyme sequences can also  
CC be used to control growth of the microorganism. Chlamydia trachomatis is  
CC responsible for a large number of diseases, e.g. eye diseases such as  
CC conventional trachoma, nonendemic trachoma, paratrachoma, and inclusion  
CC conjunctivitis; genital diseases such as nongonococcal urethritis,  
CC epididymitis, cervicitis, salpingitis, perihepatitis, bartholinitis;  
CC pneumopathy in breast feeding infants; and venereal lymphogranulomatosis.





XX DE PCR primer P38-S2513 used for dnaX gene amplification.  
XX DE  
XX DE  
KW DnaX; DNA polymerase III; holoenzyme; thermostable; thermophilic;  
KW amplification; PCR; primer; ss.  
XX OS  
OS Synthetic.  
XX Thermus thermophilus.  
XX PN WO9913060-A1.  
XX PD 18-MAR-1999.  
XX PF 11-SEP-1998; 98WO-US018946.  
XX PR 12-SEP-1997; 97US-00928213.  
XX PR 11-SEP-1998; 98US-00928213.  
XX PA (ENZY-) ENZYCO INC.  
XX XX Mchenry CS, Seville M, Cull MG, Chen JY, Kery V;  
PI WPI; 1999-243724/20.  
XX DR New isolated thermophilic polymerase holoenzyme.  
XX PT Claim 70; Page 142; 21pp; English.  
XX PS PCR primer P38-S2513 was used with primer P38-A3183 (see AAX58468) in the  
XX CC amplification of a DNA segment corresponding to the C-terminal end of the  
XX CC Thermus thermophilus dnaX gene (see AAX58429). The PCR product was used  
XX CC in the construction of plasmids that overexpress T. thermophilus tau  
XX CC fused to a C-terminal peptide that contains hexahistidine and a  
XX CC biotinylation site. Soluble dnaX was overexpressed in Escherichia coli  
XX CC host cells. The invention provides DNA polymerase III holoenzyme subunits  
XX CC of T. thermophilus, including DnaX. It also provides vectors, host cells,  
XX CC fusion proteins, antibodies, primers, probes and other reagents useful  
XX CC for identifying DNA polymerase III molecules. A claimed amplification  
XX CC method utilises a DNA polymerase, an adjunct comprising at least a  
XX CC subunit of a thermostable polymerase selected from DnaX, DnaE, DnaQ, DnaN  
XX CC and DnaA, and at least 2 primers capable of hybridising to nucleic acid  
XX CC encoding a polymerase subunit  
XX CC  
XX CC Sequence 20 BP; 3 A; 10 C; 5 G; 2 T; 0 U; 0 Other;  
SQ Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 420 CCGCCATCAACCCCTGCAC 439  
Db 1 CCGCCATGACCGCCCTGGAC 20  
RESULT 4922  
AAZ18677/C  
ID AAZ18677 standard; DNA; 20 BP.  
XX AC AAZ18677;  
XX DT 19-OCT-1999 (first entry)  
XX DE ASTH1 gene intron/exon junction sequence.  
XX KW ASTH1; asthma; human; chromosome 11p; ASTH1; ASTH1J; genetic locus;  
KW therapeutic; immunogen; polymorphism; junction; ss.  
XX OS Homo sapiens.  
XX XX WO9937809-A1.  
XX PN 29-JUL-1999.  
XX PD  
XX XX

PF 21-JAN-1998; 98WO-US001260.  
XX PR 21-JAN-1998; 98WO-US001260.  
XX PA (AXYS-) AXYS PHARM INC.  
XX PI Brooks-Wilson AR, Buckler A, Cardon L, Carey AH, Galvin M;  
PI Miller A, North M;  
XX WPI; 1999-479058/40.  
XX DR Mammalian asthma related genes, useful for diagnosis of a predisposition  
XX PT to development of asthma.  
XX PT Disclosure; Page 58; 195pp; English.  
XX PS The invention identifies a genetic locus ASTH1, associated with asthma,  
XX CC mapped to human chromosome 11p. ASTH1I and ASTH1J are genes present  
XX CC within the locus, located close to each other on human chromosome 11p,  
XX CC and have similar patterns of expression, and common sequence motifs. The  
XX CC ASTH1 genes and fragments, encoded protein, genomic regulatory regions  
XX CC and anti-ASTH1 antibodies are useful in the identification of individuals  
XX CC predisposed to development of asthma, and for the modulation of gene  
XX CC activity in vivo for prophylactic and therapeutic purposes. The ASTH1  
XX CC protein is useful as an immunogen to raise specific antibodies, in drug  
XX CC screening for compositions that mimic or modulate ASTH1 activity or  
XX CC expression, including altered forms of ASTH1 protein, and as a  
XX CC therapeutic. Sequences AAZ18643-Z18685 intron/exon junction sequences of  
XX CC ASTH1I and ASTH1J genes  
SQ Sequence 20 BP; 8 A; 4 C; 4 G; 4 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 1619 AGTTTGTACCTACCTACT 1638  
Db 20 AGTTAGTTACCTACTGTGCT 1  
RESULT 4923  
AAAX93060/C  
ID AAX93060 standard; DNA; 20 BP.  
XX AC AAX93060;  
XX DT 13-SEP-1999 (first entry)  
XX DE PCR primer used to amplify an ORF of Chlamydia pneumoniae.  
XX KW Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis;  
KW sinusitis; purulent otitis media; erythema nodosum; pharyngitis; vaccine;  
XX KW neutralising epitope; PCR primer; ss.  
XX OS Synthetic.  
XX OS Chlamydoghila pneumoniae.  
XX PN WO9927105-A2.  
XX PD 03-JUN-1999.  
XX PF 20-NOV-1998; 98WO-IB001890.  
XX PR 21-NOV-1997; 97FR-00014673.  
XX PR 04-NOV-1998; 98US-0107078P.  
XX PA (GEST ) GENSET.  
XX PI Griffais R;  
XX WPI; 1999-357842/30.  
XX XX

PT Genome sequence of Chlamydia pneumoniae.  
XX  
PS Page 1560; Disclosure; 1912pp; English.  
XX  
CC AAX91991-X97517 represent PCR primers used to amplify open reading frames  
CC and other nucleic acid sequences from the genome of Chlamydia pneumoniae  
CC (see AAX91990). C. pneumoniae causes respiratory disease such as  
CC pneumonia and bronchitis and is thought to be a contributing factor in  
CC heart disease, sarcoidosis, sinusitis, purulent otitis media, erythema  
CC nodosum or pharyngitis. The polypeptides encoded by the open reading  
CC frames of the C. pneumoniae genome (see AAY34584- AAY35879) can be used  
CC in immunogenic compositions as vaccines. Vectors containing C. pneumoniae  
CC nucleotides sequences can also be used as immunogenic compositions,  
CC especially where the vector directs the expression of a neutralising  
CC epitope of C. pneumoniae  
XX  
SQ Sequence 20 BP; 6 A; 7 C; 3 G; 4 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 1114 CTTTGCCTATGCTGTGAAG 1133  
Db 20 CTTTGCCTATAGGGTGAAG 1  
RESULT 4924  
AAX92277  
ID AAX92277 standard; DNA; 20 BP.  
XX  
AC AAX92277;  
XX  
DT 13-SEP-1999 (first entry)  
XX  
DE PCR primer used to amplify an ORF of Chlamydia pneumoniae.  
XX  
KW Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis;  
KW sinusitis; purulent otitis media; erythema nodosum; pharyngitis; vaccine;  
KW neutralising epitope; PCR primer; ss.  
XX  
OS Synthetic.  
OS Chlamydophila pneumoniae.  
XX  
PN WO9927105-A2.  
XX  
PD 03-JUN-1999.  
XX  
PF 20-NOV-1998; 98WO-IB001890.  
XX  
PR 21-NOV-1997; 97FR-00014673.  
PR 04-NOV-1998; 98US-0107078P.  
XX  
PA (GEST ) GENSET.  
XX  
PI Griffais R;  
XX  
OS Chlamydophila pneumoniae.  
XX  
PN WO9927105-A2.  
XX  
PD 03-JUN-1999.  
XX  
PF 20-NOV-1998; 98WO-IB001890.  
XX  
PR 21-NOV-1997; 97FR-00014673.  
PR 04-NOV-1998; 98US-0107078P.  
XX  
PA (GEST ) GENSET.  
XX  
PI Griffais R;  
XX  
DR WPI; 1999-357842/30.  
XX  
PT Genome sequence of Chlamydia pneumoniae.  
XX  
PS Page 1499; Disclosure; 1912pp; English.  
XX  
CC AAX91991-X97517 represent PCR primers used to amplify open reading frames  
CC and other nucleic acid sequences from the genome of Chlamydia pneumoniae  
CC (see AAX91990). C. pneumoniae causes respiratory disease such as  
CC pneumonia and bronchitis and is thought to be a contributing factor in  
CC heart disease, sarcoidosis, sinusitis, purulent otitis media, erythema  
CC nodosum or pharyngitis. The polypeptides encoded by the open reading  
CC frames of the C. pneumoniae genome (see AAY34584- AAY35879) can be used  
CC in immunogenic compositions as vaccines. Vectors containing C. pneumoniae  
CC nucleotides sequences can also be used as immunogenic compositions,  
CC especially where the vector directs the expression of a neutralising

CC epitope of C. pneumoniae  
XX  
SQ Sequence 20 BP; 7 A; 4 C; 6 G; 3 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 903 AAGTACAGAGCGGACTGTCC 922  
Db 1 AAGAACGGAGGCGGATTATCC 20  
RESULT 4925  
AAX95057/c  
ID AAX95057 standard; DNA; 20 BP.  
XX  
AC AAX95057;  
XX  
DT 13-SEP-1999 (first entry)  
XX  
DE PCR primer used to amplify an ORF of Chlamydia pneumoniae.  
XX  
KW Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis;  
KW sinusitis; purulent otitis media; erythema nodosum; pharyngitis; vaccine;  
KW neutralising epitope; PCR primer; ss.  
XX  
OS Synthetic.  
OS Chlamydophila pneumoniae.  
XX  
PN WO9927105-A2.  
XX  
PD 03-JUN-1999.  
XX  
PF 20-NOV-1998; 98WO-IB001890.  
XX  
PR 21-NOV-1997; 97FR-00014673.  
PR 04-NOV-1998; 98US-0107078P.  
XX  
PA (GEST ) GENSET.  
XX  
PI Griffais R;  
XX  
DR WPI; 1999-357842/30.  
XX  
PT Genome sequence of Chlamydia pneumoniae.  
XX  
PS Page 1718; Disclosure; 1912pp; English.  
XX  
CC AAX91991-X97517 represent PCR primers used to amplify open reading frames  
CC and other nucleic acid sequences from the genome of Chlamydia pneumoniae  
CC (see AAX91990). C. pneumoniae causes respiratory disease such as  
CC pneumonia and bronchitis and is thought to be a contributing factor in  
CC heart disease, sarcoidosis, sinusitis, purulent otitis media, erythema  
CC nodosum or pharyngitis. The polypeptides encoded by the open reading  
CC frames of the C. pneumoniae genome (see AAY34584- AAY35879) can be used  
CC in immunogenic compositions as vaccines. Vectors containing C. pneumoniae  
CC nucleotides sequences can also be used as immunogenic compositions,  
CC especially where the vector directs the expression of a neutralising  
CC epitope of C. pneumoniae  
XX  
SQ Sequence 20 BP; 7 A; 6 C; 4 G; 3 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 1114 CTTTGCCTATGCTGTGAAG 1133  
Db 20 CTTTCCCTATGATATGGGAG 1  
RESULT 4926

AAAX94674/c  
ID AAX94674 standard; DNA; 20 BP.  
XX  
AC AAX94674;  
XX  
DT 13-SEP-1999 (first entry)  
XX  
DE PCR primer used to amplify an ORF of Chlamydia pneumoniae.  
XX  
KW Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis;  
XW sinusitis; purulent otitis media; erythema nodosum; pharyngitis; vaccine;  
KW neutralising epitope; PCR primer; ss.  
XX  
OS Synthetic.  
OS Chlamydothila pneumoniae.  
XX  
PN WO9927105-A2.  
XX  
PD 03-JUN-1999.  
XX  
XX  
PF 20-NOV-1998; 98WO-IB001890.  
XX  
PR 21-NOV-1997; 97FR-00014673.  
PR 04-NOV-1998; 98US-0107078P.  
XX  
PA (GEST ) GENSET.  
PI Griffais R;  
XX  
DR WPI; 1999-357842/30.  
XX  
XX Genome sequence of Chlamydia pneumoniae.  
PS Page 1688; Disclosure; 1912pp; English.  
XX  
CC AAX91991-X97517 represent PCR primers used to amplify open reading frames  
CC and other nucleic acid sequences from the genome of Chlamydia pneumoniae  
CC (see AAX91990). C. pneumoniae causes respiratory disease such as  
CC pneumonia and bronchitis and is thought to be a contributing factor in  
CC heart disease, sarcoidosis, sinusitis, purulent otitis media, erythema  
CC nodosum or pharyngitis. The polypeptides encoded by the open reading  
CC frames of the C. pneumoniae genome (see AAY34584- AAY35879) can be used  
CC in immunogenic compositions as vaccines. Vectors containing C. pneumoniae  
CC nucleotides sequences can also be used as immunogenic compositions,  
CC especially where the vector directs the expression of a neutralising  
CC epitope of C. pneumoniae  
XX  
SQ Sequence 20 BP; 4 A; 4 C; 6 G; 6 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 1310 TTGAGACGACATACAGAA 1329  
DB 20 TTGCTGCCGAACCTACAGAA 1  
  
RESULT 4927  
AAZ28022  
ID AAZ28022 standard; DNA; 20 BP.  
XX  
AC AAZ28022;  
XX  
DT 31-JAN-2000 (first entry)  
XX  
DE Seq ID No: 8 of WO9953056.  
XX  
KW Glycoprotein; adipocyte; differentiation; heparin; sugar; human;  
KW fibroblast; medicinal composition; obesity; immunological diagnosis; ss.  
XX  
OS Synthetic.  
XX

PN WO9953056-A1.  
XX  
PD 21-OCT-1999.  
XX  
PF 09-APR-1999; 99WO-JP001906.  
XX  
PR 10-APR-1998; 98JP-00099741.  
PR 28-AUG-1998; 98JP-00243355.  
XX  
PA (SNOW ) SNOW BRAND MILK PROD CO LTD.  
XX  
PI Goto M, Tomoyasu A, Yano K, Kobayashi F, Nakagawa N, Yasuda H;  
PI Yamaguchi K, Kinoshita M, Mochizuki S, Nakakuramai T, Morinaga T;  
PI Tsuda E, Higashio K;  
XX  
DR WPI; 1999-620426/53.  
XX  
PT Novel glycoprotein as adipogenesis inhibitory factor, capable of  
PT suppressing differentiation and/or maturation of adipocytes and useful  
PT for preventing or treating obesity.  
XX  
PS Disclosure; Page 43; 52pp; Japanese.  
XX  
CC The invention provides a glycoprotein with a molecular weight of 45 kDa  
CC (under non-reducing conditions), or 28 kDa and/or 23 kDa (under reducing  
CC conditions by SDS-PAGE), that suppresses the differentiation and/or  
CC maturation of adipocytes, has an affinity for heparin and contains  
CC sugars. The glycoprotein can be produced by culturing human fibroblasts,  
CC and purifying the culture liquor on an ion-exchange column, affinity  
CC column and reversed-phase column chromatography. The glycoprotein can be  
CC used to formulate medicinal compositions for the prevention or treatment  
CC of obesity, and as an antigen for establishing immunological diagnosis  
XX  
SQ Sequence 20 BP; 4 A; 6 C; 6 G; 4 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 712 CCAGCACCTGTTGCTGCACG 731  
DB 1 CAAGGACTTGCTGCTGCACG 20  
  
RESULT 4928  
AAZ47566/c  
ID AAZ47566 standard; DNA; 20 BP.  
XX  
AC AAZ47566;  
XX  
DT 23-MAR-2000 (first entry)  
XX  
DE Antisense oligonucleotide 21 targeted to human MDR1 P-glycoprotein.  
XX  
KW Multidrug resistance gene; MDR1; human; hyperproliferative disease;  
KW cancer; autoradiography; phosphorothioate; ss.  
XX  
OS Synthetic.  
OS Homo sapiens.  
XX  
XX  
FH Key Location/Qualifiers  
FT modified\_base 1..20  
FT /\*tag= a  
FT /note= "Phosphorothioate internucleoside linkage"  
XX  
PN US6001991-A.  
XX  
PD 14-DEC-1999.  
XX  
PF 30-SEP-1997; 97US-00940250.  
XX  
PR 04-OCT-1996; 96US-00731199.  
XX



PA (ISIS-) ISIS PHARM INC.  
XX  
PI Manoharan M, Dean NM;  
XX  
XX  
DR WPI; 2000-061907/05.  
XX  
XX Antisense oligonucleotide specific for multidrug resistance P-  
PT glycoprotein is useful for treating hyperproliferative diseases and  
PT disorders e.g. cancer.  
XX  
XX Claim 1; Col 13; 24pp; English.  
PS  
XX This sequence is an antisense oligonucleotide that specifically  
CC hybridises to nucleic acids encoding a human multidrug resistance P-  
CC glycoprotein (MDR1). The oligonucleotide inhibits expression of the P-  
CC glycoprotein, which functions as an ATP driven efflux pump. The antisense  
CC oligonucleotides of the invention have a phosphorothioate modified  
CC backbone, and may contain residues with 2' modifications selected from 2'  
CC -methoxyethoxy, 2'-fluoro, 2'-O-fluoro or 2'-propyl. Some antisense  
CC oligonucleotides have cholesterol bound at the 3' end which ensures  
CC resistance to 3' exonucleases, enhances cellular uptake, and leaves the  
CC 5'terminus available for conjugation of additional functional groups. The  
CC oligonucleotides may be used in research, diagnosis or as therapeutic  
CC agents for MDR-associated hyperproliferation of cells. Inhibiting MDR1  
CC gene expression can be used to treat hyperproliferative diseases and  
CC disorders e.g. cancer, in conjunction with chemotherapeutic reagents to  
CC prevent or modulate the development of multidrug resistance during the  
CC treatment. The oligonucleotides can also be used to resensitize  
CC hyperproliferative MDR cells in an animal previously exposed to  
CC chemotherapeutic agents. Radiolabelled oligonucleotides can be used to  
CC perform autoradiography of tissues to determine localization,  
CC distribution and quantitation of MDR P-glycoproteins for research or  
CC diagnostic purposes  
XX  
SQ Sequence 20 BP; 7 A; 0 C; 3 G; 10 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
Qy 2756 TGTATATATAAAAGTATTCTT 2775  
Db 20 TCTATATATAAACTAAACTT 1  
RESULT 4929  
AAZ48056  
ID AAZ48056 standard; DNA; 20 BP.  
XX  
AC AAZ48056;  
XX  
DT 08-MAR-2000 (first entry)  
XX  
DE Human IGF-II antisense oligonucleotide GTI4017.  
XX  
KW Human; IGF-II; insulin-like growth factor II; cell growth modulation;  
KW tumour; inhibition; antisense oligonucleotide; phosphorothioate;  
KW metastasis; antitumour; antiproliferative; angiogenesis; apoptosis;  
KW tumour cell migration; proliferative disease; atherosclerosis; psoriasis;  
KW ss.  
XX  
OS Synthetic.  
OS Homo sapiens.  
XX  
XX  
FH Key Location/Qualifiers  
FT modified\_base 1..20  
FT /\*tag= a  
FT /mod\_base  
FT /note= "phosphorothioate linkages"  
XX  
PN WO9955854-A2.  
XX  
PD 04-NOV-1999.

XX 23-APR-1999; 99WO-CA000323.  
PF  
XX 23-APR-1998; 98US-0082791P.  
XX  
XX (GENE-) GENESENSE TECHNOLOGIES INC.  
PA  
XX Wright JA, Young AH, Lee YS;  
PI  
XX WPI; 2000-062027/05.  
DR  
XX Antisense oligonucleotides against mRNA of insulin-like growth factor II,  
PT for treating tumors and other proliferative diseases.  
PT  
XX Claim 5; Page 19; 72pp; English.  
PS  
XX AAZ48041 to AAZ48070 represent specifically claimed antisense  
CC oligonucleotides (I) complementary to the mRNA of human insulin-like  
CC growth factor II (IGF-II). The present invention also describes a method  
CC for inhibiting growth or metastasis of mammalian tumours by administering  
CC (I). (I) have antitumour and antiproliferative activity, and inhibits:  
CC (i) the autocrine and paracrine functions of IGF-II which promote tumour-  
CC induced angiogenesis and tumour cell migration; and (ii) autocrine growth  
CC of tumour cells, possibly including induction of apoptosis. (I) may also  
CC function as ribozymes. (I) are used for inhibiting growth and metastasis  
CC of mammalian tumours, also: (i) for treatment of other proliferative  
CC diseases, e.g. atherosclerosis and psoriasis; (ii) when labeled, as  
CC probes for detecting IGF-II mRNA; and (iii) as molecular weight markers.  
CC (I) that bind to the 5'-untranslated region of the foetal transcript (the  
CC form present in tumour cells) should not affect the adult transcript.  
CC They are effective against drug-resistant tumours  
XX  
SQ Sequence 20 BP; 2 A; 12 C; 4 G; 2 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
Qy 251 GTCCCCCACCCTCTCTCCGCGC 270  
Db 1 GTCCACCAGCTCCCCGCGC 20  
RESULT 4930  
AAA60405/c  
ID AAA60405 standard; DNA; 20 BP.  
XX  
AC AAA60405;  
XX  
DT 06-OCT-2000 (first entry)  
XX  
DE Human telomerase antisense oligonucleotide hEST24 SEQ ID NO:6.  
XX  
KW Human; telomerase; antisense oligonucleotide; inhibition; hEST2;  
KW malignant tumour; cytostatic; telomerase inhibitor; liver cancer;  
KW lung cancer; breast cancer; brain glioma; ss.  
XX Homo sapiens.  
XX WO200027858-A1.  
PN  
XX 18-MAY-2000.  
PD  
XX 29-CCT-1999; 99WO-CN000173.  
PF  
XX 09-NOV-1998; 98CN-00124461.  
XX  
XX (RALI-) INST RADIATION MEDICINE ACAD MILITARY ME.  
PA  
XX Wang S, Zheng X, Zhu B, Xing R, Guan W, Sun Z;  
PI  
XX WPI; 2000-376478/32.  
DR  
XX

PT Antisense oligonucleotides which inhibit human telomerase activity useful  
PT in the inhibition of malignant tumor growth, used to treat e.g. liver,  
PT lung and breast cancers and brain glioma.  
XX  
PS Claim 2; Page 4; 32pp; Chinese.  
XX  
CC AAA60400 to AAA60428 represent specifically claimed antisense  
CC oligonucleotides (I) complementary to a part of the gene encoding a  
CC protein subunit hEST2 of human telomerase that has reverse transcriptase  
CC activity, or its transcriptional mRNA. Also described are: (1) a  
CC pharmaceutical composition comprising (I); (2) a reagent kit for  
CC detecting telomerase hEST2 RNA component or DNA encoding telomerase hEST2  
CC containing (I); and (3) preparing a drug for treating a tumour,  
CC comprising the use of (I). The antisense oligonucleotides can inhibit  
CC telomerase activity, applicable in inhibiting the growth of malignant  
CC tumours e.g. for treatment of liver, lung and breast cancers and brain  
CC glioma  
XX  
SQ Sequence 20 BP; 1 A; 6 C; 11 G; 2 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 626 CACGCCCTGGATGCGCGGG 645  
Db 20 CACCCCGCGGATGCGCGCG 1  
RESULT 4931  
AAA33978/c  
ID AAA33978 standard; DNA; 20 BP.  
AC AAA33978;  
XX  
DT 28-JUL-2000 (first entry)  
XX  
DE Low adenosine antisense oligonucleotide SEQ ID NO:1667.  
XX  
KW Human; adenosine receptor; low adenosine antisense oligonucleotide;  
KW phosphorothioate; impaired respiration; inflammation; allergy;  
KW allergic disease; bronchoconstriction; inhibitor; antiinflammatory;  
KW antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway;  
KW lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;  
KW respiratory distress syndrome; pain; cystic fibrosis; emphysema;  
KW pulmonary hypertension; chronic obstructive pulmonary disease; COPD;  
KW cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO200009525-A2.  
XX  
PD 24-FEB-2000.  
XX  
PF 03-AUG-1999; 99WO-US017712.  
XX  
PR 03-AUG-1998; 98US-0095212P.  
XX  
PA (UYEC-) UNIV EAST CAROLINA.  
XX  
PI Nyce JW;  
XX  
DR WPI; 2000-205971/18.  
XX  
PT New antisense oligonucleotides useful for treating e.g. pulmonary  
PT vasoconstriction, inflammation, allergies, asthma, hypertension,  
PT bronchitis, emphysema, respiratory distress syndrome, ischemia or  
PT cancers.  
XX  
PS Claim 18; Page 472; 1343pp; English.  
XX  
CC The present invention describes a new composition comprising an antisense  
CC oligonucleotide (ON) with low adenosine (up to 15%), which targets

CC nucleic acids involved in bronchoconstriction, allergies, and/or  
CC inflammation. The ON can have antiinflammatory, antiallergic,  
CC antiasthmatic, cytostatic and analgesic activities. The compositions are  
CC useful for the treatment of diseases associated with inflammation,  
CC impaired airways, including lung disease and diseases whose secondary  
CC effects afflict the lungs of a subject. They can be used for treating  
CC e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma,  
CC impeded respiration, respiratory distress syndrome, pain, cystic  
CC fibrosis, pulmonary hypertension, emphysema, chronic obstructive  
CC pulmonary disease (COPD), and cancers such as leukaemias, lymphomas,  
CC carcinomas, and cancers which may metastasize to the lungs, including  
CC breast and prostate cancer. The reduction of the adenosine content of the  
CC ONs reduces side effects. The A-containing ONs break down with the  
CC release of deoxyadenosine which activates adenosine receptors causing  
CC bronchoconstriction and inflammation. AAA32313 to AAA35312 represent the  
CC nucleotide sequences given in the sequence listing from the present  
CC invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185  
CC sequences are also called SEQ ID NO:1 to 185, but the sequences differ  
CC from the previously named sequences. SEQ ID NO:11 to 1680 (AAA32323 to  
CC AAA33992) are specifically claimed ONs from the present invention. N.B.  
CC Sequences given in the disclosure of the present invention do not match  
CC up with their corresponding SEQ ID NO: sequences given in the sequence  
CC listing  
XX  
SQ Sequence 20 BP; 0 A; 9 C; 6 G; 5 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 478 CGGCCGCCAGAGCCAGGAGG 497  
Db 20 CGGCCGCCAGAGGAGGAGG 1  
RESULT 4932  
AAZ46619  
ID AAZ46619 standard; DNA; 20 BP.  
XX  
AC AAZ46619;  
XX  
DT 13-MAR-2000 (first entry)  
XX  
DE Reverse primer specific for human CACNA1F exon 13.  
XX  
KW Retinal calcium channel; RCC gene; alpha1F-subunit; retinal disorder;  
KW myopia; nystagmus; strabismus; calcium-regulated development pathway;  
KW eye disorder; human; CACNA1F; CSNB; mutational analysis; PCR primer; ss.  
XX  
OS Synthetic.  
OS Homo sapiens.  
XX  
PN WO9963078-A2.  
XX  
PD 09-DEC-1999.  
XX  
PF 02-JUN-1999; 99WO-CA000514.  
XX  
PR 02-JUN-1998; 98US-0087635P.  
XX  
PA (UYTE-) UNIV TECHNOLOGIES INT INC.  
XX  
PI Bech-Hansen T, Naylor MJ;  
XX  
DR WPI; 2000-097327/08.  
XX  
PT New isolated mammalian retinal calcium channel gene, used to develop  
PT products for the diagnosis and treatment of incomplete congenital  
PT stationary night blindness and related disorders.  
XX  
PS Disclosure; Fig 6; 55pp; English.  
XX  
CC The invention provides a DNA molecule comprising a sequence of

CC nucleotides encoding an alpha1F-subunit of a mammalian retinal calcium  
CC channel (RCC), including a human alpha1F-subunit, a murine alpha1F-  
CC subunit and orthologs of the human and murine alpha1F-subunits. The RCC  
CC gene may be used to develop products for diagnostic tests, for incomplete  
CC CSMB and risk assessment in affected families. The RCC gene can provide  
CC information as to the basic defect in this retinal conditions, which  
CC could lead to effective methods for treatment or cure of the disorder. As  
CC the associated features of myopia, nystagmus and strabismus frequently  
CC observed in patients with incomplete CSNB may be caused by calcium-  
CC regulated development pathways, identification of the RCC gene may help  
CC to elucidate the molecular details of eye development and which may lead  
CC to treatment for related eye disorders or diseases. Sequences AAZ4563-  
CC 650 represent human CACNA1F (alpha1F-subunit of RCC gene) exon-specific  
CC PCR primers, used for mutational analysis in humans  
XX  
SQ Sequence 20 BP; 7 A; 1 C; 10 G; 2 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 2546 AGAATTAAGAGGATGCTGGG 2565  
||||| ||||| ||||| |||||  
Db 1 AGAAGGAATAGGAGGCTGGG 20

RESULT 4933  
AAA46764  
ID AAA46764 standard; DNA; 20 BP.  
XX  
AC AAA46764;  
XX  
DT 25-SEP-2000 (first entry)  
XX  
DE Oligonucleotide sequence PADRCR5'.  
XX  
KW Reporter gene; pathogen detection; tuberculosis; leprosy;  
KW human immune deficiency virus; HIV; hepatitis B virus;  
KW bacterial contamination; biological corrosion; industrial pipework;  
KW cancer; microperoxidase 8 gene; ss.  
XX  
OS Synthetic.  
XX  
PN WO200034513-A1.  
XX  
PD 15-JUN-2000.  
XX  
PF 08-DEC-1999; 99WO-FR003061.  
XX  
PR 08-DEC-1998; 98FR-00015489.  
XX  
PA (PROT-) PROTEUS SA.  
XX  
PI Dautel S, Persillon C, Dupret D, Masson J, Lefevre F;  
XX  
DR WPI; 2000-423443/36.  
XX

PT Novel method for detecting target substance, useful e.g. for detecting  
PT point mutations, by labeling the target with a reporter gene and  
PT expression control elements, then transcribing, translating and  
PT detecting.  
XX  
PS Disclosure; Page 33; 60pp; French.  
XX  
CC The specification describes a method for the detection of a target  
CC substance in a sample. The method comprises specifically labeling the  
CC target substance with a reporter gene and with sequences required for the  
CC its expression, transcribing and translating the reporter gene in vitro,  
CC and detecting the reporter protein. The method is used for the diagnosis  
CC (and monitoring) of e.g. pathogens (bacteria such as those that cause  
CC tuberculosis or leprosy, or viruses such as human immune deficiency virus  
CC (HIV) or hepatitis B), to detect bacterial contamination of foods, and  
CC for studying microorganisms implicated in the biological corrosion of

CC industrial pipework and vessels. A particular application is the  
CC detection of point mutations, e.g. those associated with genetic disease  
CC or cancer. The present sequence is used in the course of the invention  
XX  
SQ Sequence 20 BP; 5 A; 7 C; 4 G; 4 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1343 TTCAGCCTGATTACCCACGG 1362  
||||| ||||| ||||| |||||  
Db 1 TTCAGCAGGATTCCCCACAG 20

RESULT 4934  
AAA40976  
ID AAA40976 standard; DNA; 20 BP.  
XX  
AC AAA40976;  
XX  
DT 16-AUG-2000 (first entry)  
XX  
DE Human TNFalpha antisense oligonucleotide ISIS# 100595.  
XX  
KW Antisense oligonucleotide; phosphorothioate; TNFalpha; cytokine; inhibit;  
KW tumour necrosis factor alpha; inflammatory bowel disease; diabetes;  
KW rheumatoid arthritis; infectious disease; multiple sclerosis; hepatitis;  
KW pancreatitis; atopic dermatitis; allograft rejection; autoimmune disease;  
KW inflammatory disease; ss.  
XX  
OS Synthetic.  
XX  
PN WO200020645-A1.  
XX  
PD 13-APR-2000.  
XX  
PF 05-OCT-1999; 99WO-US023205.  
XX  
PR 05-OCT-1998; 98US-00166186.  
PR 18-MAY-1999; 99US-00313932.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Baker BF, Bennett CF, Butler MM, Shanahan WJ;  
XX  
DR WPI; 2000-303808/26.  
XX  
PT Oligonucleotide for treating diseases associated with human tumor  
PT necrosis factor-alpha (TNF-alpha) such as, diabetes and rheumatoid  
PT arthritis, comprises nucleotide sequence complementary to intron of  
PT nucleic acid encoding TNF-alpha.  
XX  
PS Example 20; Page 95; 283pp; English.  
XX

CC This sequence represents an antisense oligonucleotide sequence which  
CC targets a region of the human tumour necrosis factor alpha (TNFalpha)  
CC nucleotide sequence. TNFalpha is an important cytokine that plays a role  
CC in host defence. It is produced mainly in macrophages and monocytes in  
CC response to infection, invasion, injury or inflammation. Overexpression  
CC of TNFalpha can result in disease states, particularly in infectious,  
CC inflammatory and autoimmune diseases. The invention relates to antisense  
CC oligonucleotides, such as that represented by the present sequence which  
CC are capable of modulating the TNFalpha gene expression. The  
CC oligonucleotides optionally have a phosphorothioate backbone, and may  
CC also optionally contain at least one 2'-O-methoxyethyl modification. The  
CC oligonucleotides are useful for modulating the expression of human  
CC TNFalpha in cells and tissues, reducing a human cell inflammatory  
CC response, reducing the blood glucose level in a human and treating a  
CC human having a disease or condition associated with TNFalpha. Examples of  
CC diseases associated with TNFalpha include diabetes, inflammatory bowel  
CC disease, multiple sclerosis, pancreatitis, rheumatoid arthritis,  
CC infectious disease, hepatitis, atopic dermatitis or allograft rejection.







RESULT 4937  
AAA99058  
ID AAA99058 standard; DNA; 20 BP.  
XX  
AC AAA99058;  
XX  
DT 18-JAN-2001 (first entry)  
XX  
DE Porcine virus activation protease PCR primer SEQ ID NO:15.  
XX  
KW Porcine; pig; protease; virus activation protease; influenza;  
KW infectious disease; virucide; envelope protein; orthomyxovirus;  
KW paramyxovirus; influenza virus; haemagglutinin; Sendai virus; F protein;  
KW identification; treatment; myxovirus infection; PCR primer; ss.  
XX  
OS Sus scrofa.  
XX  
PN WO200055334-A1.  
XX  
PD 21-SEP-2000.  
XX  
PF 15-MAR-2000; 2000WO-JP001583.  
XX  
PR 17-MAR-1999; 99JP-00072027.  
XX  
PA (SANY ) SANKYO CO LTD.  
PA (KIDO/) KIDO H.  
XX  
PI Yamashita M, Sato M, Iida K;  
XX  
DR WPI; 2000-587531/55.  
XX  
PT Virus activation protease acting on myxovirus envelope protein used for  
PT screening potential inhibitors of influenza and other myxovirus  
PT infection.  
XX  
PS Example 4; Page 39; 65pp; Japanese.  
XX  
CC The present invention describes a porcine virus activation protease. Also  
CC described are: (1) DNA encoding the protease; (2) expression vectors  
CC containing the DNA; (3) host cells transformed by the vectors; (4)  
CC production of the protease by culture of the transformants; (5) a method  
CC for screening potential inhibitors of the protease by contacting  
CC compounds with the protease and selecting for inhibitory activity; and  
CC (6) monoclonal antibodies recognizing the protease. The protease has  
CC virucide activity. The substrate of the virus activation protease is an  
CC envelope protein of orthomyxovirus or paramyxovirus, such as influenza  
CC virus haemagglutinin or Sendai virus F protein. The protease is used for  
CC identification of drugs and for the prevention and treatment of myxovirus  
CC infection such as influenza. The present sequence represents a PCR primer  
CC for the virus activation protease, which is used in an example from the  
CC present invention  
XX  
SQ Sequence 20 BP; 4 A; 8 C; 4 G; 4 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 349 CCCTCCCTACCAGCAGCTGG 368  
Db 1 CCATCCTTCCAGAGCTGG 20  
  
RESULT 4938  
AAA09616  
ID AAA09616 standard; DNA; 20 BP.  
XX  
AC AAA09616;  
XX  
DT 30-JAN-2001 (first entry)  
XX  
DE Primer SEQ ID 8 used in ADIF identification.

XX  
KW Osteogenesis promoter; adipocytogenesis inhibitory factor; ADIF;  
KW bone disease; osteoporosis; primer; ss.  
XX  
OS Synthetic.  
XX  
PN JP2000229879-A.  
XX  
PD 22-AUG-2000.  
XX  
PF 10-FEB-1999; 99JP-00033261.  
XX  
PR 10-FEB-1999; 99JP-00033261.  
XX  
PA (SNOW ) SNOW BRAND MILK PROD CO LTD.  
XX  
DR WPI; 2000-614867/59.  
XX  
PT Novel osteogenesis promoter comprising adipocytogenesis inhibiting  
PT factor, useful for treating osteoporosis.  
XX  
PS Example 11; Page 10; 13pp; Japanese.  
XX  
CC This invention relates to an osteogenesis promoter, that contains an  
CC adipocytogenesis inhibitory factor (ADIF) as the active component. The  
CC promoter is useful in the prevention or treatment of bone diseases such  
CC as osteoporosis. The present sequence represents a primer used in the  
CC identification of the ADIF cDNA sequence  
XX  
SQ Sequence 20 BP; 4 A; 6 C; 6 G; 4 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 712 CCAGCAGCTGTGCTGCACG 731  
Db 1 CAAGGACTGTGCTGCACG 20  
  
RESULT 4939  
AAA13090  
ID AAA13090 standard; DNA; 20 BP.  
XX  
AC AAA13090;  
XX  
DT 14-JUL-2000 (first entry)  
XX  
DE PCR primer used for interferon (IFN) production.  
XX  
KW Increase expression; immune response recognition molecule;  
KW antigen presentation; growth; cell function; screening method; MHC II;  
KW induce; prevent; suppress; major histocompatibility complex; MHC I;  
KW immune recognition process; treat; autoimmune disease; cancer; probe;  
KW PCR primer; interferon; IFN; ss.  
XX  
OS Synthetic.  
XX  
PN WO200015768-A1.  
XX  
PD 23-MAR-2000.  
XX  
PF 10-SEP-1999; 99WO-US020782.  
XX  
PR 11-SEP-1998; 98US-00151612.  
XX  
PA (KOHN/) KOHN L D.  
PA (SUZU/) SUZUKI K.  
PA (MORI/) MORI A.  
PA (TISH/) TISHI K.  
PA (KLIN/) KLINMAN D M.  
PA (RICE/) RICE J M.  
XX

PI Kohn LD, Suzuki K, Mori A, Iishi K, Klinman DM, Rice JM;  
XX WPI; 2000-271411/23.  
DR  
XX  
PT Increasing the expression of an immune response recognition molecule in a  
PT mammalian cell by introducing a double stranded (DS) polynucleotide,  
PT useful for treating autoimmune diseases and cancers.  
XX  
PS Example 2; Page 65; 147pp; English.  
XX  
CC This sequence represents a PCR primer used to create a probe for the  
CC interferon (IFN) nucleotide sequence. The invention relates to a method  
CC for increasing the expression of an immune response recognition molecule  
CC in a mammalian cell by introducing a double stranded polynucleotide into  
CC the cell. The introduction of the polynucleotide causes the activation of  
CC a gene involved in antigen presentation, growth and function of the cell,  
CC and increases the ability of the cell to present antigen to an immune  
CC cell. The gene detected by the probe created using the present PCR  
CC primer, is an example of a gene which is activated in the method. The  
CC probe can be used to assess the effectiveness of the method. A method is  
CC also included in the invention for screening a drug composition for its  
CC ability to induce, prevent or suppress the activation of molecules  
CC involved in antigen presentation. The methods are useful for inducing,  
CC preventing, or suppressing activation of MHC class I and class II  
CC molecules, other molecules involved in antigen presentation and the  
CC immune recognition process and molecules controlling the growth and  
CC function of cells. The methods are used to treat autoimmune diseases and  
CC cancer  
XX  
SQ Sequence 20 BP; 4 A; 6 C; 5 G; 5 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 829 TGAGGTCTTCTGCTCAGTCC 848  
Db 1 TGAAGACTTCTGCTCGGACC 20  
RESULT 4940  
AAZ99922  
ID AAZ99922 standard; DNA; 20 BP.  
XX  
AC AAZ99922;  
XX  
DT 25-JUL-2000 (first entry)  
XX  
DE PCR primer used to amplify a 544 bp probe from hCOCH5B2 cDNA.  
XX  
KW COCH5B2; hCOCH5B2; extracellular matrix; fibrillar collagen;  
KW hearing disorder; human nonsyndromic sensorineural deafness;  
KW vestibular involvement; DFNA9; PCR primer; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO200018211-A2.  
XX  
PD 06-APR-2000.  
XX  
PF 29-SEP-1999; 99WO-US022645.  
XX  
PR 29-SEP-1998; 98US-0102343P.  
PR 10-SEP-1999; 99US-00394264.  
XX  
PA (BGHM ) BRIGHAM & WOMENS HOSPITAL.  
XX  
PI Morton CC, Robertson NG;  
XX  
DR WPI; 2000-292953/25.  
XX  
PT COCH5B2 nucleic acid molecule and encoded protein, useful for treatment  
PT of human nonsyndromic sensorineural deafness with vestibular involvement

PT (DFNA9).  
XX  
PS Example; Page 89; 133pp; English.  
XX  
CC PCR primers AAZ99921-22 were used to amplify a 544 bp probe from human  
CC COCH5B2 (hCOCH5B2) cDNA. The amplified probe was labelled with 32P, and  
CC used to screen to isolate genomic clones of hCOCH5B2. COCH5B2 molecules  
CC are capable of modulating interactions of components of the extracellular  
CC matrix, e.g. fibrillar collagens. The COCH5B2 protein is expressed in  
CC high levels in human foetal cochlea and vestibule. The protein contains  
CC at least one or two von Willebrand factor type A-like domains, and at  
CC least one factor C homologous domain. The hCOCH5B2 polypeptides and  
CC polynucleotides are useful for treating hearing disorders, such as human  
CC nonsyndromic sensorineural deafness with vestibular involvement (DFNA9)  
XX  
SQ Sequence 20 BP; 5 A; 3 C; 4 G; 8 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 1106 GCTAGGGACTTTGCCTATGT 1125  
Db 1 GCTATGGAATTGCATATCT 20  
RESULT 4941  
AAA94525/c  
ID AAA94525 standard; DNA; 20 BP.  
XX  
AC AAA94525;  
XX  
DT 09-JAN-2001 (first entry)  
XX  
DE Antisense oligonucleotide #20965 targeted to human G-alpha-S1.  
XX  
KW G-alpha-S1; infection; inflammation; tumour; antisense; human;  
KW phosphorothioate; 2'-methoxyethyl; MOE; 5-methylcytidine;  
KW Gs-alpha short form; ss.  
XX  
OS Homo sapiens.  
XX  
FH Location/Qualifiers  
FT modified\_base 1..20  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "Optionally the internucleotide linkages are  
FT phosphorothioate"  
FT modified\_base 1..5  
FT /\*tag= b  
FT /mod\_base= OTHER  
FT /note= "Optionally the nucleotides are 2'-methoxyethyl  
FT and cytidine residues are 5-methylcytidines"  
FT modified\_base 16..20  
FT /\*tag= c  
FT /mod\_base= OTHER  
FT /note= "Optionally the nucleotides are 2'-methoxyethyl  
FT and cytidine residues are 5-methylcytidines"  
XX  
PN US6110664-A.  
XX  
PD 29-AUG-2000.  
XX  
PF 25-JUN-1999; 99US-00344914.  
XX  
PR 25-JUN-1999; 99US-00344914.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Cowsert LM;  
XX  
DR WPI; 2000-586346/55.  
XX



CC or treat a condition arising from the activation of a ras oncogene. They  
CC may also be used to modulate the expression of human H-ras or human Ki-  
CC ras. The antisense oligonucleotides may contain modified backbones,  
CC substituted sugar moieties and modified bases. The sequences preferably  
CC have a phosphorothioate backbone. They are preferably  
CC oligodeoxynucleotides or chimeric oligonucleotides containing 2'-O-methyl  
CC ends and a central deoxy gap  
XX  
SQ Sequence 20 BP; 6 A; 6 C; 7 G; 1 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 69 GACGCCTGGTCACCGTGACC 88  
Db 20 GCCGCCTGGTTACTGTGTC 1  
  
RESULT 4944  
AAC61860  
ID AAC61860 standard; DNA; 20 BP.  
XX  
AC AAC61860;  
XX  
DT 06-MAR-2001 (first entry)  
XX  
DE Antisense oligonucleotide directed against murine Fas (Apo-1) gene.  
XX  
KW Human; Fas; Apo-1; antisense compound; Fas ligand; Fap-1; hepatitis;  
KW Fas associated protein 1; protein tyrosine phosphatase; cancer;  
KW autoimmune disease; inflammatory disease; lymphoma; phosphorothioate; ss.  
XX  
OS Synthetic.  
OS Mus musculus.  
XX  
FH Key  
FT misc\_feature 1..20 Location/Qualifiers  
FT /\*tag= b  
FT /note= "contains phosphorothioate linkages"  
FT modified\_base 1..5  
FT /\*tag= a  
FT /note= "2'-methoxyethoxy residues"  
FT modified\_base 16..20  
FT /\*tag= c  
FT /note= "2'-methoxyethoxy residues"  
XX  
PN WO200061150-A1.  
XX  
PD 19-OCT-2000.  
XX  
PF 10-APR-2000; 2000WO-US009540.  
XX  
PR 12-APR-1999; 99US-00290640.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Dean NM, Marcusson EG;  
XX  
DR WPI; 2000-628395/60.  
XX  
PT Antisense oligonucleotides for treating hepatitis and colon, liver or  
PT lung cancer are inhibitors of Fas, Fas ligand or Fas associated protein 1  
PT (Fap-1) expression.  
XX  
PS Example 5; Page 54; 116pp; English.  
XX  
CC AAC61860-78 represent antisense oligonucleotides which are directed  
CC against nucleic acids encoding murine Fas (Apo-1). The specification  
CC describes antisense compounds which are targeted to the 5'-untranslated  
CC region, translational start site, translational termination region or 3'-  
CC untranslated region of nucleic acid molecules encoding Fas, Fas ligand  
CC (FasL), or Fap-1 (Fas associated protein 1, protein tyrosine

CC phosphatase). The antisense compounds are used to inhibit the expression  
CC of Fas, FasL or Fap-1 in cells or tissues. They are used to treat  
CC autoimmune or inflammatory diseases such as hepatitis. They can also be  
CC used to treat cancer, especially colon, liver or lung cancer or lymphoma  
XX  
SQ Sequence 20 BP; 8 A; 4 C; 8 G; 0 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 231 GCAGCAATGGGAATCCGCGG 250  
Db 1 GCAGCAAGGGAACACAGCGG 20  
  
RESULT 4945  
AAA07904  
ID AAA07904 standard; DNA; 20 BP.  
XX  
AC AAA07904;  
XX  
DT 07-JUL-2000 (first entry)  
XX  
DE Hs-UNC-53/2 specific RT-PCR forward primer.  
XX  
KW UNC-53; Caenorhabditis elegans; microtubule; neural regeneration;  
KW anticancer; anti-neurodegeneration; antifibrotic; anti-adhesive; human;  
KW antisclerotic; antimetastatic; anti-arthritis; autoimmune disease;  
KW RT-PCR; primer; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO9963080-A1.  
XX  
PD 09-DEC-1999.  
XX  
PF 02-JUN-1999; 99WO-EP003848.  
XX  
PR 03-JUN-1998; 98GB-00011962.  
XX  
PA (JANC ) JANSSEN PHARM NV.  
XX  
PI Luyten WHML, De Raeymaeker MC, Geysen JJGH, Bogaert TAOE;  
PI Maerten LJS, Verhasselt P, Van De Craen M;  
XX  
DR WPI; 2000-116370/10.  
XX  
PT Novel proteins and nucleic acids e.g. for treating neurodegeneration.  
XX  
PS Disclosure; Fig 6b; 146pp; English.  
XX  
CC The invention provides vertebrate (human) protein homologue of a UNC-53  
CC protein of Caenorhabditis elegans. The UNC-53 binds to microtubules or  
CC their plus ends. The UNC-53 sequences are used to promote neural  
CC regeneration, revascularization and wound healing; also for treating  
CC neurodegenerative disease, acute traumatic injury, fibrotic disease and  
CC autoimmune diseases (e.g. rheumatoid arthritis and sclerosis). The UNC-53  
CC polynucleotides can be used for recombinant production of the proteins,  
CC as a source of probes for detecting allelic variants and polymorphisms,  
CC for sequencing genomic DNA and for detecting UNC-53 expression; and as  
CC source of therapeutic antisense sequences. Cells that express the protein  
CC are used to identify regulators of cell shape, growth, motility and  
CC migration. They can also be used to identify proteins that are involved  
CC in signal transduction pathways also involving UNC-53, and to identify  
CC compounds that alter attachment of UNC-53 to microtubules. A target gene  
CC coupled to a UNC-53 encoding sequence may be used to deliver the target  
CC gene to a cellular microtubule or its plus ends. Sequences AAA07902-7911  
CC represent primers specific for Hs-UNC-53/2, used in RT-PCR studies of Hs-  
CC UNC-53/2 expression  
XX  
SQ Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;



Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1258 ACTTCTCAGCCAGACCGGA 1277  
| | | | | | | | | | | | | | | |  
Db 1 ACGTCTCAGACAGGCAGGA 20

RESULT 4946  
AAA07907/c  
ID AAA07907 standard; DNA; 20 BP.  
XX  
AC AAA07907;  
XX  
DT 07-JUL-2000 (first entry)  
XX  
DE Hs-UNC-53/2 specific RT-PCR reverse primer.  
XX  
KW UNC-53; Caenorhabditis elegans; microtubule; neural regeneration;  
KW anticancer; anti-neurodegeneration; antifibrotic; anti-adhesive; human;  
KW antisclerotic; antimetastatic; anti-arthritis; autoimmune disease;  
KW RT-PCR; primer; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO9963080-A1.  
XX  
PD 09-DEC-1999.  
XX  
PF 02-JUN-1999; 99WO-EP003848.  
XX  
PR 03-JUN-1998; 98GB-00011962.  
XX  
PA (JANC ) JANSSEN PHARM NV.  
PI Luyten WHML, De Raeymaeker MC, Geysen JJGH, Bogaert TAOE;  
PI Maerten LJS, Verhasselt P, Van De Craen M;  
XX  
DR WPI; 2000-116370/10.  
XX  
PT Novel proteins and nucleic acids e.g. for treating neurodegeneration.  
XX  
PS Disclosure; Fig 6b; 146pp; English.  
XX  
CC The invention provides vertebrate (human) protein homologue of a UNC-53  
CC protein of Caenorhabditis elegans. The UNC-53 binds to microtubules or  
CC their plus ends. The UNC-53 sequences are used to promote neural  
CC regeneration, revascularization and wound healing; also for treating  
CC neurodegenerative disease, acute traumatic injury, fibrotic disease and  
CC autoimmune diseases (e.g. rheumatoid arthritis and sclerosis). The UNC-53  
CC polynucleotides can be used for recombinant production of the proteins,  
CC as a source of probes for detecting allelic variants and polymorphisms,  
CC for sequencing genomic DNA and for detecting UNC-53 expression; and as  
CC source of therapeutic antisense sequences. Cells that express the protein  
CC are used to identify regulators of cell shape, growth, motility and  
CC migration. They can also be used to identify proteins that are involved  
CC in signal transduction pathways also involving UNC-53, and to identify  
CC compounds that alter attachment of UNC-53 to microtubules. A target gene  
CC coupled to a UNC-53 encoding sequence may be used to deliver the target  
CC gene to a cellular microtubule or its plus ends. Sequences AAA07902-7911  
CC represent primers specific for Hs-UNC-53/2, used in RT-PCR studies of Hs-  
CC UNC-53/2 expression  
XX  
SQ Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1258 ACTTCTCAGCCAGACCGGA 1277  
| | | | | | | | | | | | | | | |  
Db 20 ACGTCTCAGACAGGCAGGA 1

RESULT 4947  
AAZ74552  
ID AAZ74552 standard; DNA; 20 BP.  
XX  
AC AAZ74552;  
XX  
DT 10-SEP-2001 (first entry)  
XX  
DE Human biallelic marker downstream amplification primer SEQ ID NO:8908.  
XX  
KW Human genome; biallelic marker; high density disequilibrium map;  
KW genomic map; haplotype; phenotype; polymorphic base; genotyping;  
KW haplotyping; hybridisation; identification; characterisation;  
KW amplification; single nucleotide polymorphism; SNP; PCR primer;  
KW diagnosis; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO9954500-A2.  
XX  
PD 28-OCT-1999.  
XX  
PF 21-APR-1999; 99WO-IB000822.  
XX  
PR 21-APR-1998; 98US-0082614P.  
PR 23-NOV-1998; 98US-0109732P.  
XX  
PA (GEST ) GENSET.  
XX  
PI Cohen D, Blumenfeld M, Chumakov I;  
XX  
DR WPI; 2000-013267/01.  
XX  
PT Novel biallelic markers used to construct a high density disequilibrium  
PT map of the human genome.  
XX  
PS Claim 8; Page 2130; 2745pp; English.  
XX  
CC AAZ65654 to AAZ69578 represent human biallelic markers from the present  
CC invention, which contain a polymorphic base at position 24 of their  
CC nucleotide sequences. AAZ69579 to AAZ77440 represent amplification  
CC primers for the biallelic markers. The biallelic markers of the invention  
CC have a variety of uses: they can be used for high density mapping of the  
CC human genome, and in complex association studies and haplotyping studies  
CC which are useful in determining the genetic basis for disease states.  
CC Compositions and methods of the invention can also be useful for the  
CC identification of the targets for the development of pharmaceutical  
CC agents and diagnostic methods, as well as the characterisation of the  
CC differential efficacious responses to and side effects from  
CC pharmaceutical agents acting on a disease as well as other treatment.  
CC N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and  
CC 3367, are not actually given a sequence in the Sequence Listing from the  
CC present invention  
XX  
SQ Sequence 20 BP; 11 A; 3 C; 4 G; 2 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 970 AGCCAAATCGAAAAATGGAG 989  
| | | | | | | | | | | | | | | |  
Db 1 AGCCAAATGACAAATAGAG 20

RESULT 4948  
AAZ75568  
ID AAZ75568 standard; DNA; 20 BP.  
XX  
AC AAZ75568;  
XX

DT 10-SEP-2001 (first entry)  
XX Human biallelic marker downstream amplification primer SEQ ID NO:9924.  
DE  
XX  
KW Human genome; biallelic marker; high density disequilibrium map;  
KW genomic map; haplotype; phenotype; polymorphic base; genotyping;  
KW haplotyping; hybridisation; identification; characterisation;  
KW amplification; single nucleotide polymorphism; SNP; PCR primer;  
KW diagnosis; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO9954500-A2.  
XX  
PD 28-OCT-1999.  
XX  
PF 21-APR-1999; 99WO-IB0000822.  
XX  
PR 21-APR-1998; 98US-0082614P.  
PR 23-NOV-1998; 98US-0109732P.  
XX  
PA (GEST ) GENSET.  
PA Cohen D, Blumenfeld M, Chumakov I;  
PI WPI; 2000-013267/01.  
XX Novel biallelic markers used to construct a high density disequilibrium  
PT map of the human genome.  
PT  
XX Claim 8; Page 2346; 2745pp; English.  
PS AAZ65654 to AAZ69578 represent human biallelic markers from the present  
XX invention, which contain a polymorphic base at position 24 of their  
CC nucleotide sequences. AAZ69579 to AAZ77440 represent amplification  
CC primers for the biallelic markers. The biallelic markers of the invention  
CC have a variety of uses: they can be used for high density mapping of the  
CC human genome, and in complex association studies and haplotyping studies  
CC which are useful in determining the genetic basis for disease states.  
CC Compositions and methods of the invention can also be useful for the  
CC identification of the targets for the development of pharmaceutical  
CC agents and diagnostic methods, as well as the characterisation of the  
CC differential efficacious responses to and side effects from  
CC pharmaceutical agents acting on a disease as well as other treatment.  
CC N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and  
CC 3367, are not actually given a sequence in the Sequence Listing from the  
CC present invention  
XX  
SQ Sequence 20 BP; 10 A; 2 C; 5 G; 3 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 1493 GAGAAAATGGAGAAACACAG 1512  
Db 1 GATATAAAGGAGATACACAG 20  
RESULT 4949  
AAZ71396  
ID AAZ71396 standard; DNA; 20 BP.  
XX  
AC AAZ71396;  
XX  
DT 10-SEP-2001 (first entry)  
XX  
DE Human biallelic marker upstream amplification primer SEQ ID NO:5752.  
XX  
KW Human genome; biallelic marker; high density disequilibrium map;  
KW genomic map; haplotype; phenotype; polymorphic base; genotyping;  
KW haplotyping; hybridisation; identification; characterisation;  
KW amplification; single nucleotide polymorphism; SNP; PCR primer;

KW diagnosis; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO9954500-A2.  
XX  
PD 28-OCT-1999.  
XX  
PF 21-APR-1999; 99WO-IB0000822.  
XX  
PR 21-APR-1998; 98US-0082614P.  
PR 23-NOV-1998; 98US-0109732P.  
XX  
PA (GEST ) GENSET.  
PA Cohen D, Blumenfeld M, Chumakov I;  
PI WPI; 2000-013267/01.  
XX Novel biallelic markers used to construct a high density disequilibrium  
PT map of the human genome.  
PT  
XX Claim 8; Page 1457; 2745pp; English.  
PS AAZ65654 to AAZ69578 represent human biallelic markers from the present  
XX invention, which contain a polymorphic base at position 24 of their  
CC nucleotide sequences. AAZ69579 to AAZ77440 represent amplification  
CC primers for the biallelic markers. The biallelic markers of the invention  
CC have a variety of uses: they can be used for high density mapping of the  
CC human genome, and in complex association studies and haplotyping studies  
CC which are useful in determining the genetic basis for disease states.  
CC Compositions and methods of the invention can also be useful for the  
CC identification of the targets for the development of pharmaceutical  
CC agents and diagnostic methods, as well as the characterisation of the  
CC differential efficacious responses to and side effects from  
CC pharmaceutical agents acting on a disease as well as other treatment.  
CC N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and  
CC 3367, are not actually given a sequence in the Sequence Listing from the  
CC present invention  
XX  
SQ Sequence 20 BP; 7 A; 0 C; 11 G; 2 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 1535 AGCTTAGGAGAGTAGGGAAG 1554  
Db 1 AGATGAGGAGTGGAGGGAAG 20  
RESULT 4950  
AAZ76490/c  
ID AAZ76490 standard; DNA; 20 BP.  
XX  
AC AAZ76490;  
XX  
DT 10-SEP-2001 (first entry)  
XX  
DE Human biallelic marker downstream amplification primer SEQ ID NO:10846.  
XX  
KW Human genome; biallelic marker; high density disequilibrium map;  
KW genomic map; haplotype; phenotype; polymorphic base; genotyping;  
KW haplotyping; hybridisation; identification; characterisation;  
KW amplification; single nucleotide polymorphism; SNP; PCR primer;  
KW diagnosis; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO9954500-A2.  
XX  
PD 28-OCT-1999.  
XX

PF 21-APR-1999; 99WO-IB000822.  
XX  
PR 21-APR-1998; 98US-0082614P.  
PR 23-NOV-1998; 98US-0109732P.  
XX  
PA (GEST ) GENSET.  
XX  
PI Cohen D, Blumenfeld M, Chumakov I;  
XX  
DR WPI; 2000-013267/01.  
XX  
XX Novel biallelic markers used to construct a high density disequilibrium  
PT map of the human genome.  
XX  
XX Claim 9; Page 2543; 2745pp; English.  
XX  
XX AAZ65654 to AAZ69578 represent human biallelic markers from the present  
CC invention, which contain a polymorphic base at position 24 of their  
CC nucleotide sequences. AAZ69579 to AAZ77440 represent amplification  
CC primers for the biallelic markers. The biallelic markers of the invention  
CC have a variety of uses: they can be used for high density mapping of the  
CC human genome, and in complex association studies and haplotyping studies  
CC which are useful in determining the genetic basis for disease states.  
CC Compositions and methods of the invention can also be useful for the  
CC identification of the targets for the development of pharmaceutical  
CC agents and diagnostic methods, as well as the characterisation of the  
CC differential efficacious responses to and side effects from  
CC pharmaceutical agents acting on a disease as well as other treatment.  
CC N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and  
CC 3367, are not actually given a sequence in the Sequence Listing from the  
CC present invention  
XX  
SQ Sequence 20 BP; 2 A; 3 C; 5 G; 10 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 2124 GAACTTGTAGAACGAAGC 2143  
||||| |||||||||  
Db 20 GAAACCACTATAACGAAGC 1  
  
RESULT 4951  
AAA80059/C  
ID AAA80059 standard; DNA; 20 BP.  
XX  
AC AAA80059;  
XX  
DT 20-NOV-2000 (first entry)  
XX  
DE Hepatitis B virus related oligonucleotide probe #322.  
XX  
DE Hepatitis B virus; HBV; Hepatitis A virus; HAV; probe; detection;  
KW mutation; high-density gene chip; ss.  
XX  
OS Hepatitis B virus.  
XX  
PN CN1252452-A.  
XX  
PD 10-MAY-2000.  
XX  
PF 24-SEP-1999; 99CN-00114460.  
XX  
PR 24-SEP-1999; 99CN-00114460.  
XX  
PA (UYDO-) UNIV DONGNAN.  
XX  
PI Sun X, Lu Z, Wang Y;  
XX  
DR WPI; 2000-443233/39.  
XX  
XX High-density gene chip making process.

XX Example 1; Fig 15; 19pp; Chinese.  
PS  
XX  
CC The present invention describes a method which comprises making a high-  
CC density gene chip, specifically for making high-density micro-array of  
CC oligonucleotide probes. An oligonucleotide probe selecting process to  
CC seek preferentially length variable and coverage variable probes is  
CC provided to ensure identical cross melting temperature of probes to the  
CC maximum limit, and this can make the cross control of gene chip  
CC relatively simple and raise the reliability of the gene chip detecting  
CC results. The process proposes a specific probe selection method for  
CC detecting target sequence directly, detecting mutation in both specific  
CC and non-specific sites and a probe overall arrangement scheme. AAA79738  
CC to AAA80201 represent oligonucleotide probe sequences which are used in  
CC examples from the present invention  
XX  
SQ Sequence 20 BP; 11 A; 5 C; 4 G; 0 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 1678 GGACTTCTTAGTTGTTCTC 1697  
||||| |||||||||  
Db 20 GGTCCTCTTGGTTGTTCTC 1  
  
RESULT 4952  
AAA80060  
ID AAA80060 standard; DNA; 20 BP.  
XX  
AC AAA80060;  
XX  
DT 20-NOV-2000 (first entry)  
XX  
DE Hepatitis B virus related oligonucleotide probe #323.  
XX  
DE Hepatitis B virus; HBV; Hepatitis A virus; HAV; probe; detection;  
KW mutation; high-density gene chip; ss.  
XX  
OS Hepatitis B virus.  
XX  
PN CN1252452-A.  
XX  
PD 10-MAY-2000.  
XX  
PF 24-SEP-1999; 99CN-00114460.  
XX  
PR 24-SEP-1999; 99CN-00114460.  
XX  
PA (UYDO-) UNIV DONGNAN.  
XX  
PI Sun X, Lu Z, Wang Y;  
XX  
DR WPI; 2000-443233/39.  
XX  
XX High-density gene chip making process.  
PS  
XX Example 1; Fig 15; 19pp; Chinese.  
XX  
CC The present invention describes a method which comprises making a high-  
CC density gene chip, specifically for making high-density micro-array of  
CC oligonucleotide probes. An oligonucleotide probe selecting process to  
CC seek preferentially length variable and coverage variable probes is  
CC provided to ensure identical cross melting temperature of probes to the  
CC maximum limit, and this can make the cross control of gene chip  
CC relatively simple and raise the reliability of the gene chip detecting  
CC results. The process proposes a specific probe selection method for  
CC detecting target sequence directly, detecting mutation in both specific  
CC and non-specific sites and a probe overall arrangement scheme. AAA79738  
CC to AAA80201 represent oligonucleotide probe sequences which are used in  
CC examples from the present invention  
XX

SQ Sequence 20 BP; 8 A; 5 C; 5 G; 2 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 1411 CATCAAGAGCCCTGATTG 1430  
||| ||||| ||||| |||  
Db 1 CAACCAAGAGACCTGATGG 20  
RESULT 4953  
AAC55854 standard; DNA; 20 BP.  
XX  
AC AAC55854;  
XX  
DT 19-JAN-2001 (first entry)  
XX  
DE PCR primer used to amplify fragment of pKN108.  
XX  
KW Mitomycin; biosynthesis; mitosane ring system; antibiotic; anti-cancer;  
KW anti-inflammatory; immune-enhancer; immunosuppressant; asthma;  
KW chronic obstructive pulmonary disease; respiratory inflammation;  
KW fungicide; pesticide; PCR primer; ss.  
XX  
OS Synthetic.  
XX  
PN WO200053737-A2.  
XX  
PD 14-SEP-2000.  
XX  
PF 10-MAR-2000; 2000WO-US006394.  
XX  
PR 12-MAR-1999; 99US-00266965.  
XX  
PA (MINU ) UNIV MINNESOTA.  
PA (SHER/) SHERMAN D H.  
PA (MAOY/) MAO Y.  
PA (VARO/) VAROGLU M.  
PA (HEMM/) HE M.  
PA (SHEL/) SHELDON P C.  
XX  
PI Sherman DH, Mao Y, Varoglu M, He M, Sheldon PC;  
XX WPI; 2000-601980/57.  
XX  
PT Novel nucleic acid molecule comprising mitomycin biosynthetic gene  
PT cluster useful for cloning mitomycin biosynthetic genes for elucidating  
PT the molecular basis of mitosane ring system biosynthesis.  
XX  
PS Example 2; Page 68; 399pp; English.  
XX  
CC This invention relates to isolated and purified nucleic acid molecules  
CC from the mitomycin biosynthetic gene cluster. Mitomycins are a group of  
CC natural products that contain a variety of functional groups, including  
CC amino benzoquinone and axiridine ring systems. The S. lavendulae  
CC mitomycin biosynthetic gene cluster comprises 47 mitomycin genes spanning  
CC 55kb of DNA. The invention includes an expression cassette comprising a  
CC mitomycin biosynthetic gene operably linked to a promoter, and host cells  
CC transformed with the cassette. The nucleotide, and protein sequences and  
CC the transformed host cells of the invention result in antiasthmatic,  
CC antiinflammatory, cytostatic, immunomodulatory, and antibiotic  
CC activities. The nucleotide sequences are used to elucidate the molecular  
CC basis for the biosynthesis of the mitosane ring system, as well as to  
CC engineer the biosynthesis of novel natural products, e.g. antibiotics,  
CC anti-inflammatory agents, anti-cancer agents, immune-enhancers,  
CC immunosuppressants, agents to treat asthma, chronic obstructive pulmonary  
CC disease as well as other disease involving respiratory inflammation, or  
CC cholesterol-lowering agents or as crop protection agents (e.g. fungicides  
CC or insecticides) as well as biopolymers, e.g., in packaging or biomedical  
CC applications, or to engineer PHA monomer syntheses. Sequences AAC55782-  
CC C55881, AAC55815-C55849 and AAB32485-B32542 represent mitomycin

CC biosynthetic gene cluster DNA sequences and encoded proteins. Sequences  
CC AAC55812-C55814, AAC55850-C55856 and AAC55862-C55869 represent PCR  
CC primers used in the cloning of the mitomycin biosynthetic genes  
XX  
SQ Sequence 20 BP; 3 A; 8 C; 8 G; 1 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 507 TGCCCTCGCACCGGCGC 526  
||| ||||| ||||| |||  
Db 1 TGCGCGCGCAGCAGGACGC 20  
RESULT 4954  
AAC55853/C  
ID AAC55853 standard; DNA; 20 BP.  
XX  
AC AAC55853;  
XX  
DT 19-JAN-2001 (first entry)  
XX  
DE PCR primer used to amplify fragment of pKN108.  
XX  
KW Mitomycin; biosynthesis; mitosane ring system; antibiotic; anti-cancer;  
KW anti-inflammatory; immune-enhancer; immunosuppressant; asthma;  
KW chronic obstructive pulmonary disease; respiratory inflammation;  
KW fungicide; pesticide; PCR primer; ss.  
XX  
OS Synthetic.  
XX  
PN WO200053737-A2.  
XX  
PD 14-SEP-2000.  
XX  
PF 10-MAR-2000; 2000WO-US006394.  
XX  
PR 12-MAR-1999; 99US-00266965.  
XX  
PA (MINU ) UNIV MINNESOTA.  
PA (SHER/) SHERMAN D H.  
PA (MAOY/) MAO Y.  
PA (VARO/) VAROGLU M.  
PA (HEMM/) HE M.  
PA (SHEL/) SHELDON P C.  
XX  
PI Sherman DH, Mao Y, Varoglu M, He M, Sheldon PC;  
XX WPI; 2000-601980/57.  
XX  
PT Novel nucleic acid molecule comprising mitomycin biosynthetic gene  
PT cluster useful for cloning mitomycin biosynthetic genes for elucidating  
PT the molecular basis of mitosane ring system biosynthesis.  
PS Example 2; Page 68; 399pp; English.  
XX  
CC This invention relates to isolated and purified nucleic acid molecules  
CC from the mitomycin biosynthetic gene cluster. Mitomycins are a group of  
CC natural products that contain a variety of functional groups, including  
CC amino benzoquinone and axiridine ring systems. The S. lavendulae  
CC mitomycin biosynthetic gene cluster comprises 47 mitomycin genes spanning  
CC 55kb of DNA. The invention includes an expression cassette comprising a  
CC mitomycin biosynthetic gene operably linked to a promoter, and host cells  
CC transformed with the cassette. The nucleotide, and protein sequences and  
CC the transformed host cells of the invention result in antiasthmatic,  
CC antiinflammatory, cytostatic, immunomodulatory, and antibiotic  
CC activities. The nucleotide sequences are used to elucidate the molecular  
CC basis for the biosynthesis of the mitosane ring system, as well as to  
CC engineer the biosynthesis of novel natural products, e.g. antibiotics,  
CC anti-inflammatory agents, anti-cancer agents, immune-enhancers,  
CC immunosuppressants, agents to treat asthma, chronic obstructive pulmonary  
CC disease as well as other disease involving respiratory inflammation, or



CC cholesterol-lowering agents or as crop protection agents (e.g. fungicides  
CC or insecticides) as well as biopolymers, e.g., in packaging or biomedical  
CC applications, or to engineer PHA monomer synthases. Sequences AAC55782-  
CC C55881, AAC55815-C55849 and AAB32485-B32542 represent mitomycin  
CC biosynthetic gene cluster DNA sequences and encoded proteins. Sequences  
CC AAC55812-C55814, AAC55850-C55856 and AAC55862-C55869 represent PCR  
CC primers used in the cloning of the mitomycin biosynthetic genes  
XX  
SQ Sequence 20 BP; 1 A; 8 C; 8 G; 3 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 507 TGCCTCGCACACGGGCGC 526  
Db 20 TGC GCGCGCAGCACGGACGC 1  
|||||  
  
RESULT 4955  
AAZ95329  
ID AAZ95329 standard; DNA; 20 BP.  
XX  
AC AAZ95329;  
XX  
DT 31-MAY-2000 (first entry)  
XX  
DE Human mtPEPCK phosphorothioate antisense oligonucleotide SEQ ID NO:17.  
XX  
KW Human; mitochondrial phosphoenolpyruvate carboxykinase; PEPCK-M; PCK2;  
KW PEPCK-mitochondrial; mtPEPCK; antisense oligonucleotide; modulation;  
KW phosphorothioate; inhibition; diagnosis; ss.  
XX  
OS Homo sapiens.  
OS Synthetic.  
XX  
FH Key Location/Qualifiers  
FT modified\_base 1..20  
FT /\*tag= a  
FT /note= "phosphorothioate linkages"  
XX  
PN US6030837-A.  
XX  
PD 29-FEB-2000.  
XX  
PF 03-AUG-1999; 99US-00366257.  
XX  
PR 03-AUG-1999; 99US-00366257.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI McKay R, Cowser LM, Butler MM;  
XX  
DR WPI; 2000-205209/18.  
XX  
PT New antisense compound targeted to a nucleic acid molecule encoding human  
PT mitochondrial phosphoenolpyruvate carboxykinase useful for treating a  
PT human with a mitochondrial phosphoenolpyruvate carboxykinase-associated  
PT disease.  
XX  
PS Claim 3; Col 39; 32pp; English.  
XX  
CC AAZ95320 to AAZ95359 represent antisense oligonucleotides targeted to a  
CC nucleic acid molecule encoding human mitochondrial phosphoenolpyruvate  
CC carboxykinase (also known as PEPCK-mitochondrial; PEPCK-M; PCK2 and  
CC mtPEPCK), where the oligonucleotide specifically hybridize with and  
CC inhibit the expression of human mtPEPCK. The antisense oligonucleotides  
CC can be used for inhibiting the expression of mtPEPCK in human cells or  
CC tissues in vitro and can also be used for treating an animal,  
CC particularly a human suspected of having or being prone to a condition or  
CC disease associated with expression of mtPEPCK. They can also be used in  
CC diagnostics and as research reagents in sandwich and other assays  
XX

SQ Sequence 20 BP; 5 A; 7 C; 5 G; 3 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 1444 CTACATGAACCTGGAGACC 1463  
Db 1 CTGCATGCAGCCTGGAAACC 20  
|||||  
  
RESULT 4956  
AAA29832  
ID AAA29832 standard; DNA; 20 BP.  
XX  
AC AAA29832;  
XX  
DT 25-AUG-2000 (first entry)  
XX  
DE Human jun N-terminal kinase kinase-2 antisense oligonucleotide #17.  
XX  
KW Human; jun N-terminal kinase kinase-2; JKK-2; modulation; tumour;  
KW antiinflammatory; cytostatic; antiinfectious; infection; inflammation;  
KW detection; antisense therapy; phosphorothioate; ss.  
XX  
OS Homo sapiens.  
XX  
FH Key Location/Qualifiers  
FT modified\_base 1..20  
FT /\*tag= a  
FT /note= "Phosphorothioate linkages"  
XX  
PN US6054440-A.  
XX  
PD 25-APR-2000.  
XX  
PF 24-JUN-1999; 99US-00344001.  
XX  
PR 24-JUN-1999; 99US-00344001.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Monia BP, Cowser LM;  
XX  
DR WPI; 2000-338506/29.  
XX  
PT Antisense compound specifically hybridizing and inhibiting the expression  
PT of human Jun N-terminal kinase kinase-2 is useful for treating infection,  
PT inflammation and tumor.  
XX  
PS Claim 3; Col 40; 31pp; English.  
XX  
CC The present invention describes an antisense compound (I) of 8-30  
CC nucleobases, specifically hybridizing to, and inhibiting expression of,  
CC human jun N-terminal kinase kinase-2 (JNK-2). Also described is a method  
CC of inhibiting the expression of human JNK-2 in human cells or tissues,  
CC comprising contacting the cells or tissues, with (I), in vitro. (I) has  
CC antiinflammatory, cytostatic and antiinfectious activities. (I) is useful  
CC for inhibiting the expression of JNK-2 in human cells or tissues and  
CC prevents or delays infection, inflammation or tumour formation associated  
CC with altered expression of JNK-2. (I) is also useful for detecting the  
CC levels of JNK-2 in a sample. The present sequence represents a  
CC phosphorothioate antisense oligonucleotide for human JNK-2, from the  
CC present invention  
XX  
SQ Sequence 20 BP; 3 A; 10 C; 4 G; 3 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 414 ACGCCGCGCCATCAACCCC 433  
|||||

```
Db      1 AGGACGGCGGCATCTTCCCC 20
RESULT 4957
AAZ43999/c
ID      AAZ43999 standard; DNA; 20 BP.
XX
AC      AAZ43999;
XX
DT      17-MAR-2000 (first entry)
XX
DE      Bacteria detecting reverse primer #1.
XX
KW      Detection; microorganism; primer; probe; cosmetic; food; ss.
XX
OS      Bacteria.
XX
PN      WO9958713-A2.
XX
PD      18-NOV-1999.
XX
PF      10-MAY-1999; 99WO-DE001471.
XX
PR      12-MAY-1998; 98DE-01022108.
XX
PA      (BIOI-) BIOINSIDE GMBH.
XX
PI      Gerbling K, Lauter F, Grohmann L;
XX
DR      WPI; 2000-072341/06.
XX
PT      A test kit for detecting microbially soiled, non sterile products,
PT      especially pharmaceuticals and cosmetics.
XX
PS      Example 26; Page 75; 77pp; German.
XX
CC      This invention describes a novel test kit to detect microbially soiled,
CC      non-sterile products, in particular after GMP-rich lines, also in
CC      cosmetics and food. The method involves the use of DNA fragment having a
CC      forward primer, probe, a reverse primer and if necessary a spacer
CC      oligonucleotide. The test kit and method are useful for economic
CC      detection of germs in pharmaceutical and cosmetic products. In particular
CC      the method is useful for detecting E. coli, P. aeruginosa, S. aureus and
CC      Salmonella
XX
SQ      Sequence 20 BP; 9 A; 4 C; 4 G; 3 T; 0 U; 0 Other;
Query Match      0.5%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 4.5e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY      2427 TGGTGCACCTTCTTACGACTT 2446
      ||||| ||||| ||||| |||||
Db      20 TGGTTACCTTGTTCAGACTT 1
RESULT 4958
AAAF20100/c
ID      AAF20100 standard; DNA; 20 BP.
XX
AC      AAF20100;
XX
DT      14-MAR-2001 (first entry)
XX
DE      Human tumour necrosis factor alpha polynucleotide fragment #1667.
XX
KW      Low adenosine antisense oligonucleotide; phosphorothioate; allergy;
KW      human; airway disorder; bronchoconstriction; lung inflammation;
KW      surfactant depletion; respiratory; bronchodilator; antiinflammatory;
KW      immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic;
KW      respiratory obstruction; pulmonary obstruction; impeded respiration;
KW      surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;
KW      respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
```

```
KW      pulmonary hypertension; emphysema; pulmonary transplantation rejection;
KW      chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
KW      cancer; ss.
XX
OS      Homo sapiens.
XX
PN      WO200062736-A2.
XX
PD      26-OCT-2000.
XX
PF      24-MAR-2000; 2000WO-US008020.
XX
PR      06-APR-1999; 99US-0127958P.
XX
PA      (UYEC-) UNIV EAST CAROLINA.
PA      (NYCE/) NYCE J W.
XX
PI      Nyce JW;
XX
DR      WPI; 2000-679539/66.
XX
PT      Low adenosine (A) content antisense oligonucleotides which do not trigger
PT      adenosine receptors during metabolism, useful e.g. for treating cancers
PT      and respiratory obstructions.
XX
PS      Claim 14; Page 241; 1592pp; English.
XX
CC      The present invention describes low adenosine (A) content antisense
CC      oligonucleotides and compositions (I) comprising them. In the antisense
CC      oligonucleotides the A is replaced by a 'Universal' or alternative base.
CC      (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,
CC      immunosuppressive, antiasthmatic, hypotensive and cytostatic activities.
CC      The antisense oligonucleotides and (I) can be used to down-regulate the
CC      expression and or activity of target polypeptides associated with
CC      lung/respiratory disorders and malignancies, such as stimulating and
CC      activating peptide factors and transmitters, transcription factors,
CC      immunoglobulins and antibodies, antibody receptors, cytokines and
CC      chemokines, endogenously produced specific and non-specific enzymes,
CC      binding proteins, adhesion molecules and their receptors, cytokine and
CC      chemokine receptors, adenosine receptors, bradykinin receptors, central
CC      nervous system (CNS) and peripheral nervous and non-nervous system
CC      receptors, CNS and peripheral nervous and non-nervous system peptide
CC      transmitters, defensins, growth factors, vasoactive peptides and
CC      receptors, binding proteins and malignancy associated proteins. The
CC      antisense oligonucleotides may be used in this way to treat disorders
CC      including respiratory obstruction (especially pulmonary obstruction
CC      and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or
CC      surfactant hypoproduction which are associated with a disease or
CC      condition selected from pulmonary vasoconstriction, inflammation,
CC      allergies, asthma, impeded respiration, respiratory distress syndrome
CC      (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary
CC      hypertension, emphysema, chronic obstructive pulmonary disease (COPD),
CC      pulmonary transplantation rejection, pulmonary infections, bronchitis,
CC      and/or cancer. AAF18434 to AAF21543 represent human polynucleotide
CC      fragments and antisense oligonucleotides used in the exemplification of
CC      the present invention
XX
SQ      Sequence 20 BP; 0 A; 9 C; 6 G; 5 T; 0 U; 0 Other;
Query Match      0.5%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 4.5e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY      478 CGCGCCGCAGAGCCAGGAGG 497
      ||||| ||||| ||||| |||||
Db      20 CGGCCCCAGAGGGAAGAGG 1
RESULT 4959
AAAF15603/c
ID      AAA15603 standard; DNA; 20 BP.
XX
AC      AAA15603;
```

XX 01-AUG-2000 (first entry)  
DT Reverse PCR primer for hPMP69 gene amplification.  
XX  
DE  
XX  
XX PCR primer; adrenoleukodystrophy; 4-phenyl butyrate; 4-PBA; X-ALD;  
KW peroxisome proliferation; fatty acid reduction; treatment; human;  
KW peroxisomal membrane half-transporter protein; hPMP69; ss.  
XX  
OS Homo sapiens.  
XX  
XX WO200018394-A1.  
PN  
XX  
PD 06-APR-2000.  
XX  
XX 28-SEP-1999; 99WO-US022415.  
PF  
XX 28-SEP-1998; 98US-0102186P.  
PR  
XX (UYJO ) UNIV JOHNS HOPKINS.  
PA  
XX Smith KD;  
PI  
XX  
XX WPI; 2000-292995/25.  
DR  
XX Novel method for treating adrenoleukodystrophy comprises administering an  
PT agent which causes peroxisome proliferation.  
PT  
XX  
PS Example 7; Page 23; 50pp; English.  
XX  
XX This sequence represents a PCR primer used to amplify the hPMP69 gene  
CC that encodes a peroxisomal membrane half-transporter protein. The PCR  
CC product is used in a method for testing the effect of 4-Phenyl butyrate  
CC (4-PBA) treatment on cells derived from patients with X-linked  
CC adrenoleukodystrophy (X-ALD). The invention relates to a treatment for a  
CC patient with adrenoleukodystrophy. The treatment comprises administering  
CC an agent which causes peroxisome proliferation (e.g. 4-PBA). Peroxisome  
CC proliferation causes a reduction in the level of C24:0 or C26:0 fatty  
CC acids in the central nervous system of the patient. Adrenoleukodystrophy  
CC is associated with defective peroxisomal beta-oxidation of saturated long  
CC chain fatty acids. The methods are useful for treating a patient with  
CC adrenoleukodystrophy, and screening for candidate therapeutic agents for  
CC treating adrenoleukodystrophy  
XX  
SQ Sequence 20 BP; 2 A; 10 C; 2 G; 6 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 793 TCAGAGGAGCTGCTGGGG 812  
Db 20 TCAGGAGAGCTGGAGGGAG 1  
  
RESULT 4960  
AAA57980  
ID AAA57980 standard; DNA; 20 BP.  
XX  
AC AAA57980;  
XX  
DT 10-OCT-2000 (first entry)  
XX  
DE Candida albicans TCa2 retrotransposon insertion site, contig4-3072.  
XX  
KW Retrotransposon; pCal; TCa2; Ty1; copia; long terminal repeat; LTR;  
KW gag gene; group antigen; polyprotein; pol; aspartate protease; integrase;  
KW reverse transcriptase; RNaseH; pseudoknot; readthrough translation;  
KW stop codon suppression; gene delivery; gene therapy vector;  
KW genetic vaccine composition; immunogenic; transgenic animal;  
KW genomic insertion site; ds.  
XX  
OS Candida albicans.

XX WO200026397-A1.  
PN  
XX  
PD 11-MAY-2000.  
XX  
XX 01-NOV-1999; 99WO-NZ000179.  
PF  
XX 30-OCT-1998; 98CA-02249046.  
PR  
XX 30-OCT-1998; 98US-0106342P.  
XX  
PA (JANC ) JANSSEN PHARM NV.  
XX  
XX Luyten WHML, De Backer MD, Nelissen BJM, Poulter RTM;  
PI  
XX WPI; 2000-365640/31.  
DR  
XX Novel retrotransposon expression vectors useful for expressing an  
PT antigen, epitope or therapeutic agent, or detecting genes or the presence  
PT of Candida in a sample.  
XX  
PS Example 19; Fig 69; 204pp; English.  
XX  
XX The invention relates to novel retrotransposons from the yeast Candida  
CC albicans which have a copy number of 40-150, preferably 50-100 copies per  
CC genome. In particular, the invention relates to the novel C. albicans  
CC Ty1/copia retrotransposon pCal (AAA57920), and to the integrated form of  
CC this retrotransposon, designated TCa2, and to the novel C. albicans  
CC retrotransposons 1-28. pCal was initially isolated from C. albicans  
CC hOG1042 and has a copy number of 50-100 copies per cell. It comprises  
CC identical 280 bp long terminal repeats (LTRs) and two open reading frames  
CC (ORFs). The first ORF encodes a gag (group antigen) protein, and the  
CC second ORF encodes a polyprotein (pol) consisting of an aspartate  
CC protease, integrase, reverse transcriptase (RT) and RNaseH. The gag and  
CC pol ORFs of pCal are in the same reading frame, separated only by a  
CC termination codon (TGA). Translation of the pol ORF occurs through the  
CC occasional readthrough suppression of the stop codon, which is mediated  
CC by the formation of a pseudoknot within the gag-pol mRNA. The  
CC retrotransposons of the invention can be used as vectors for in vitro or  
CC in vivo transformation and expression. They can thus be used for the  
CC delivery and expression of a therapeutic, immunological or immunogenic  
CC molecule (e.g., an antigen) and may also be used for eliciting an  
CC immunological response in a host organism. They are therefore useful in  
CC genetic vaccine compositions and for gene therapy, particularly where the  
CC use of retroviral vectors is unsafe or undesirable. Additionally, the  
CC retrotransposons may be used to generate transgenic animals, to detect  
CC the presence of Candida in a sample, to detect and disrupt genes, and to  
CC assign functions to nucleotide sequences. Sequences AAA57968-A57981  
CC represent motifs within the C. albicans genome into which a TCa2  
CC retrotransposon was able to insert  
XX  
SQ Sequence 20 BP; 15 A; 0 C; 3 G; 2 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 2781 AATTGAAAAA 2800  
Db 1 AATAGAGAGAAAAAATA 20  
  
RESULT 4961  
AAA86885/C  
ID AAA86885 standard; DNA; 20 BP.  
XX  
AC AAA86885;  
XX  
DT 15-JAN-2001 (first entry)  
XX  
DE Probe for wild type beta-globin PCR targets.  
XX  
KW Detection; nucleic acid hybrid; depolymerisation; analysis; SNP;  
KW single nucleotide polymorphism; identification; viral load; probe;



KW genotyping; medical marker diagnostic; primer; target; mutation;  
KW genetic disease; ss.  
XX  
OS Oryctolagus cuniculus.  
XX WO2000049180-A1.  
XX PD 24-AUG-2000.  
XX PF 18-FEB-2000; 2000WO-US004242.  
XX PR 18-FEB-1999; 99US-00252436.  
XX PR 21-JUL-1999; 99US-00358972.  
XX PR 25-AUG-1999; 99US-00383316.  
XX PA (PROM-) PROMEGA CORP.  
XX PI Shultz JW, Lewis MK, Leippe D, Mandrekar M, Kephart D, Rhodes RB;  
PI Andrews CA, Hartnett JR, Gu T, Olson RJ, Wood KV, Welch R;  
XX DR WPI; 2000-565377/52.  
XX  
PT Determining presence or absence of a predetermined endogenous nucleic  
PT acid sequence by using an enzyme that depolymerizes the 3' end of an  
PT oligonucleotide probe hybridized to a target sequence to release  
PT identifier nucleotides.  
XX  
PS Example; Page 319; 389pp; English.  
XX  
CC The present invention describes a method (M1) for determining the  
CC presence or absence of a predetermined endogenous nucleic acid target  
CC sequence (ENAT). The method comprises hybridising a probe having an  
CC identifier nucleotide (IN) with ENAT which is treated with an enzyme that  
CC depolymerises the 3' end of hybridised NA to release the INs. M1 is used  
CC for determining the number of known sequence repeats present in a nucleic  
CC acid target sequence in a nucleic acid sample. The method is also useful  
CC for determining whether a nucleic acid target sequence in a sample is an  
CC allele from a homozygous or heterozygous locus. The method is also useful  
CC for detection of mutations, translocations and SNPs in nucleic acids  
CC (including those associated with genetic disease), determination of viral  
CC load, species identification, sample contamination, and analysis of  
CC forensic samples. AAA86791 to AAA87079 and AAB12817 represent sequence  
CC which are used in the exemplification of the present invention. N.B.  
CC There is a discrepancy between the SEQ ID NO: and sequences given in the  
CC examples, and the SEQ ID NO: and sequences given in the sequence listing  
CC from the present invention  
XX  
SQ Sequence 20 BP; 3 A; 8 C; 2 G; 7 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 886 CAAAGTGACAGTGGCTGAAG 905  
Db 20 CAAGGTGAACGTGGATGAAG 1

RESULT 4962  
AAC93192  
ID AAC93192 standard; DNA; 20 BP.  
XX  
AC AAC93192;  
XX  
DT 15-FEB-2001 (first entry)  
XX  
DE Human STAT3 phosphorothioate antisense oligonucleotide SEQ ID NO:43.

KW Human; mouse; STAT3; phosphorothioate; antisense oligonucleotide;  
KW modulation; signal transducer and activator of transcription;  
KW DNA-binding protein; signal transduction; inhibition; apoptosis;  
KW inflammatory disease; cancer; antiinflammatory; antirheumatic;  
KW cytosstatic; immunostimulatory; rheumatoid arthritis; leukaemia; myeloma;

KW melanoma; lymphoma; diagnosis; ss.  
XX  
OS Homo sapiens.  
XX PN WO2000061602-A1.  
XX PD 19-OCT-2000.  
XX PF 06-APR-2000; 2000WO-US0009054.  
XX PR 08-APR-1999; 99US-00288461.  
XX PA (ISIS-) ISIS PHARM INC.  
XX PI Karras JG;  
XX WPI; 2000-619223/59.  
DR  
XX  
PT New antisense compound for inhibiting the expression of signal transducer  
PT and activator of transcription 3 (STAT3) in cells or tissues and treating  
PT diseases or condition associated with STAT3, such as rheumatoid arthritis  
PT and cancer.  
XX  
PS Example 2; Page 47; 104pp; English.  
XX

CC The present invention describes an antisense compound (I), 8 to 30  
CC nucleobases in length, that is targeted to a nucleic acid molecule  
CC encoding STAT3 (Signal Transducer and Activator of Transcription) and  
CC which inhibits the expression of it. (I) has antiinflammatory,  
CC antirheumatic, cytostatic and immunostimulatory activities. (I) is used  
CC for inhibiting the expression of STAT3 in cells or tissues, treating an  
CC animal having a disease or condition associated with STAT3 or a human  
CC having a disease or condition characterised by a reduction in apoptosis,  
CC and inducing apoptosis in a cell. Diseases or conditions that are treated  
CC are rheumatoid arthritis, cancer of the breast, prostate, brain, head  
CC and/or neck, leukaemia, myeloma, melanoma or lymphoma. (I) can also be  
CC used for diagnostic methods in detecting and determining the role of  
CC STAT3 in various cell functions, physiological processes and conditions  
CC and for diagnosing the conditions associated with expression of STAT3.  
CC (I) can be used alone or with other drugs as an immunostimulator. (I) is  
CC used in sandwich and colourimetric assays, involving enzyme conjugation  
CC and radiolabeling and is used in diagnostic kits. AAC93150 encodes human  
CC STAT3 and AAC93231 encodes mouse STAT3 as given in the exemplification of  
CC the present invention. AAC93151 to AAC93230 and AAC93232 to AAC93299  
CC represent STAT3 phosphorothioate antisense oligonucleotides, and AAC93300  
CC represents a mismatch control oligonucleotide which are used in example  
CC from the present invention

SQ Sequence 20 BP; 5 A; 3 C; 7 G; 5 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 1741 TGACAAGTACTGGCTCTTTA 1760  
Db 1 TGACAAGGAGTGGGTCTCTA 20

RESULT 4963  
AAA80584/c  
ID AAA80584 standard; DNA; 20 BP.  
XX  
AC AAA80584;  
XX

DT 22-NOV-2000 (first entry)  
XX  
DE Human ASTH1J gene exon e 3' boundary region.

KW ASTH1 locus; ASTH1J; human; chromosome 11p; asthma;  
KW bronchial hyperreactivity; ets family; transcription factor;  
KW splice variant; genetic predisposition; polymorphism; antibody;  
KW drug screening; prophylaxis; therapy; diagnosis; exon boundary; ss.



XX OS Homo sapiens.  
XX PN US6087485-A.  
XX PD 11-JUL-2000.  
XX PF 21-JAN-1998; 98US-00009913.  
XX PR 21-JAN-1997; 97US-0035663P.  
XX PR 01-JUL-1997; 97US-0051432P.  
XX PA (AXYS-) AXYS PHARM INC.  
XX PI Galvin M, Miller A, North M, Cardon L, Buckler A;  
PI Brooks-Wilson AR, Carey AH;  
XX DR WPI; 2000-505109/45.  
XX  
PT New nucleic acids other than naturally occurring chromosomes encoding  
PT ASTH1 protein, for e.g. screening compositions that modulate expression  
PT or function of ASTH1 proteins or as diagnostics for genetic  
PT predisposition to asthma.  
XX PS Example; Col 38; 131pp; English.  
XX  
CC The invention relates to the ASTH1 locus on the short arm of human  
CC chromosome (11p). This locus comprises the ASTH1I and ASTH1J genes, which  
CC are associated with a genetic predisposition to asthma and bronchial  
CC hyperreactivity. The ASTH1I and ASTH1J genes are oriented in opposite  
CC directions with the ASTH1 locus, and have similar patterns of expression  
CC and common sequence motifs. They are both expressed in trachea, lung and  
CC several other tissues. ASTH1I and ASTH1J are novel members of the ets  
CC family of transcription factors, which have been implicated in the  
CC activation of a variety of genes including the TCRA gene and cytokine  
CC genes known to be important in the aetiology of asthma. Both ASTH1I and  
CC ASTH1J mRNAs are alternatively spliced. Alternative splicing of  
CC transcripts has no effect on the open reading frame of ASTH1J, as the  
CC exons involved are all 5' to the start codon in exon b. In contrast,  
CC alternative splicing of ASTH1I transcripts results in 3 different ASTH1I  
CC isoforms. The invention also encompasses mouse asth1j protein. The ASTH1  
CC nucleic acids are useful as diagnostics to identify a hereditary  
CC predisposition to asthma, as probes for identifying ASTH1 related genes,  
CC for identifying expression of the gene in a biological specimen, and for  
CC generating genetically modified non-human animals or site specific gene  
CC modifications in cell lines. The encoded ASTH1 proteins are useful as  
CC immunogens to raise specific antibodies; in drug screening for  
CC compositions that mimic or modulate activity or expression of ASTH1I  
CC and/or ASTH1J (including altered forms of these proteins); and as a  
CC therapeutic. The ASTH1 genes or fragments thereof, encoded proteins,  
CC ASTH1 genomic regulatory regions, and anti-ASTH1I and anti-ASTH1J  
CC antibodies are useful in the identification of individuals predisposed to  
CC development of asthma, and for modulation of gene activity in vivo for  
CC prophylactic and therapeutic purposes. The intact ASTH1I or ASTH1J  
CC proteins or active fragments thereof may be used to modulate or reduce  
CC bronchial hyperreactivity. Sequences AAA80571-A80594 represent the exon  
CC boundary regions of the human ASTH1J gene  
XX  
SQ Sequence 20 BP; 8 A; 4 C; 4 G; 4 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 1619 AGTTTGTACCTACTTACT 1638  
|||||  
Db 20 AGTTAGTTACTGTGCT 1  
  
RESULT 4964  
ABL57553/c  
ID ABL57553 standard; DNA; 20 BP.  
XX

AC ABL57553;  
XX  
DT 26-JUL-2002 (first entry)  
XX  
DE Synthetic deoxyribonucleotide poly t.  
XX  
KW Concentration; quantification; mutation detection; polymorphic;  
KW polymerase chain reaction; PCR; ss.  
XX  
OS Synthetic.  
XX  
PN EP1046717-A2.  
XX  
PD 25-OCT-2000.  
XX  
PF 20-APR-2000; 2000EP-00108643.  
XX  
PR 20-APR-1999; 99JP-00111601.  
XX  
PA (NIBI-) JAPAN BIOINDUSTRY ASSOC.  
PA (AGEN ) AGENCY OF IND SCI & TECHNOLOGY.  
PA (KANK-) KANKYO ENG CO LTD.  
XX  
PI Kurane R, Kanagawa T, Kamagata Y, Kurata S, Yamada K, Yokomaku T;  
PI Koyama O, Furusho K;  
XX  
DR WPI; 2000-657765/64.  
XX  
PT Determining the concentration of a target nucleic acid, useful e.g. for  
PT detecting genetic mutations, comprises using a fluorescently labeled  
PT probe in which emission is reduced by binding to the target nucleic acid.  
XX  
PS Example 6; Page 23; 55pp; English.  
XX  
CC The invention relates to the determination of the concentration of a  
CC nucleic acid target, using a fluorescently labeled probe which produces  
CC reduced fluorescence emission when hybridised to the target nucleic acid.  
CC The method comprises measuring the reduction in emission caused by  
CC hybridisation. The new method is particularly used to quantify target  
CC nucleic acids by a real-time polymerase chain reaction, e.g. for  
CC quantifying microbial cells in co-cultures or symbiotic systems, for  
CC detecting gene mutations or polymorphisms, and for analysing melting  
CC curves of target nucleic acids to determine a Tm value. Methods of the  
CC invention allow target nucleic acids to be quantified quickly, easily and  
CC accurately. Particularly there is no need to remove unbound probe, and no  
CC materials are introduced that inhibit amplification by Taq polymerase (so  
CC conventional PCR conditions can be used). The specificity of PCR is kept  
CC high (amplification of primer dimers is delayed), and the limit of  
CC quantitation is reduced. Complex probes are not needed, and amplification  
CC can be monitored in real time. The working graph for data analysis  
CC (automatically generated by a computer) has a higher correlation  
CC coefficient than conventional graphs so more accurate quantitation is  
CC possible. The current sequence represents a synthetic  
CC deoxyribonucleotide that was used for investigating the effects of  
CC the number of G(s) in each target nucleic acid, and the number of G(S) in  
CC its corresponding invention nucleic acid probe  
XX  
SQ Sequence 20 BP; 4 A; 1 C; 0 G; 15 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 2785 GAAAAAATAATATATATA 2804  
|||||  
Db 20 GAAAAAATAATATATATA 1  
  
RESULT 4965  
ABL57554  
ID ABL57554 standard; DNA; 20 BP.  
XX  
AC ABL57554;

XX DT 26-JUL-2002 (first entry)  
XX DE Synthetic deoxyribonucleotide poly u.  
XX KW Concentration; quantification; mutation detection; polymorphic;  
KW polymerase chain reaction; PCR; ss.  
XX OS Synthetic.  
XX PN EF1046717-A2.  
XX PD 25-OCT-2000.  
XX PF 20-APR-2000; 2000EP-00108643.  
XX PR 20-APR-1999; 99JP-00111601.  
XX PA (NIBI-) JAPAN BIOINDUSTRY ASSOC.  
PA (AGEN) AGENCY OF IND SCI & TECHNOLOGY.  
PA (KANK-) KANKYO ENG CO LTD.  
XX PI Kurane R, Kanagawa T, Kamagata Y, Kurata S, Yamada K, Yokomaku T;  
PI Koyama O, Furusho K;  
XX WPI; 2000-657765/64.  
XX DT Determining the concentration of a target nucleic acid, useful e.g. for  
DT detecting genetic mutations, comprises using a fluorescently labeled  
DT probe in which emission is reduced by binding to the target nucleic acid.  
XX Example 6; Page 23; 55pp; English.  
XX The invention relates to the determination of the concentration of a  
CC nucleic acid target, using a fluorescently labeled probe which produces  
CC reduced fluorescence emission when hybridised to the target nucleic acid.  
CC The method comprises measuring the reduction in emission caused by  
CC hybridisation. The new method is particularly used to quantify target  
CC nucleic acids by a real-time polymerase chain reaction, e.g. for  
CC quantifying microbial cells in co-cultures or symbiotic systems, for  
CC detecting gene mutations or polymorphisms, and for analysing melting  
CC curves of target nucleic acids to determine a Tm value. Methods of the  
CC invention allow target nucleic acids to be quantified quickly, easily and  
CC accurately. Particularly there is no need to remove unbound probe, and no  
CC materials are introduced that inhibit amplification by Taq polymerase (so  
CC conventional PCR conditions can be used). The specificity of PCR is kept  
CC high (amplification of primer dimers is delayed), and the limit of  
CC quantitation is reduced. Complex probes are not needed, and amplification  
CC can be monitored in real time. The working graph for data analysis  
CC (automatically generated by a computer) has a higher correlation  
CC coefficient than conventional graphs so more accurate quantitation is  
CC possible. The current sequence represents a synthetic  
CC deoxyribonucleotide that was used for investigating the effects of  
CC the number of G(s) in each target nucleic acid, and the number of G(s) in  
CC its corresponding invention nucleic acid probe  
XX SQ Sequence 20 BP; 4 A; 0 C; 0 G; 16 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 2166 TTTT TTTT TTTT TTTT TTTT TTTT TTTT 2185  
Db 1 TATATATATTTT TTTT TTTT TTTT TTTT 20  
RESULT 4966  
AAA37705  
ID AAA37705 standard; DNA; 20 BP.  
XX AC AAA37705;  
XX

DT 22-NOV-2000 (first entry)  
XX DE Human Rad51 antisense inhibitor AS5.  
XX KW Antisense inhibitor; human; Rad51; cell proliferation; cancer survival;  
KW radiation sensitivity; therapy; AS5; ss.  
XX OS Homo sapiens.  
XX PN WO200047231-A2.  
XX PD 17-AUG-2000.  
XX PF 03-FEB-2000; 2000WO-US002881.  
XX PR 10-FEB-1999; 99US-0119578P.  
PR 06-DEC-1999; 99US-00454495.  
XX (PANG-) PANGENE CORP.  
XX Reddy G;  
XX WPI; 2000-506091/45.  
XX Inhibiting cell proliferation useful for cancer therapy, comprises  
XX administering Rad51 inhibitor in vivo.  
XX Claim 8; Page 25; 42pp; English.  
XX This sequence represents an antisense inhibitor of human Rad51,  
CC designated AS5 (also referred to as R51AS5). The antisense inhibitors can  
CC be used in a method of the invention, for inhibiting cell proliferation.  
CC They can also be used in methods for inducing sensitivity to radiation  
CC and DNA damaging chemotherapeutics in an individual and in a method for  
CC prolonging survival in an individual with cancer. The methods and  
CC antisense molecules are useful for inhibiting cell proliferation,  
CC especially cancerous cell proliferation, for inducing sensitivity to  
CC radiation and DNA damaging chemotherapeutics in individuals and for  
CC prolonging survival in an individual with cancer. Kits for carrying out  
CC the methods may be used to diagnose and/or treat cancer and for  
CC adjunctive therapy  
XX SQ Sequence 20 BP; 1 A; 8 C; 10 G; 1 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 563 GCGGGCGCGGTGAGCGCCCG 582  
Db 1 GCGGGCGGTGGCAGCGCCCG 20  
RESULT 4967  
AAF31770/C  
ID AAF31770 standard; DNA; 20 BP.  
XX AC AAF31770;  
XX 10-APR-2001 (first entry)  
XX Human RANK antisense oligonucleotide, SEQ ID NO: 28.  
XX Human; cytostatic; antiinflammatory; antisense oligonucleotide; cancer;  
KW receptor activator of NF-kappaB; RANK; infection; inflammation; ss.  
XX OS Homo sapiens.  
XX US6171860-B1.  
XX 09-JAN-2001.  
XX 05-NOV-1999; 99US-00435296.  
PF

XX PR 05-NOV-1999; 99US-00435296.  
XX (ISIS-) ISIS PHARM INC.  
XX PA Baker BF, Cowser LM;  
XX PI WPI; 2001-136876/14.  
XX DR Novel antisense compounds capable of modulating expression of human  
XX PT receptor activator of NF-kappaB useful for diagnosis, prophylaxis and  
XX PT treatment of diseases associated with expression of RANK.  
XX PS Claim 14; Col 42; 40pp; English.  
XX CC The present sequence is one of a number of antisense compounds of 8 to 30  
CC nucleobases in length that have been designed to target a 5'untranslated  
CC region, start codon, coding region or 3'untranslated region of the human  
CC receptor activator of NF-kappaB (RANK). The antisense compounds  
CC specifically hybridise with and inhibit the expression of RANK. The  
CC antisense oligonucleotides are useful for inhibiting the expression of  
CC human RANK in human cells or tissues. They can be utilised for  
CC diagnostics, therapeutics for the treatment of diseases associated with  
CC the expression of RANK, prophylaxis e.g. to prevent or delay infection,  
CC inflammation or tumour formation, and as research reagent. The antisense  
CC compounds are safely and effectively administered to humans  
XX SQ Sequence 20 BP; 3 A; 7 C; 8 G; 2 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 705 TCGACGACCGACACCTGTTG 724  
Db 20 TGGGCGCCCGACACCGTTG 1  
RESULT 4968  
AAA91252/c  
ID AAA91252 standard; DNA; 20 BP.  
XX AC AAA91252;  
XX 08-MAY-2001 (first entry)  
XX Antisense IGFBP-5 inhibitor #58.  
XX Insulin-like growth factor binding protein-5; IGFBP-5; human;  
KW antisense oligonucleotide; hormone-regulated cancer; prostatic cancer;  
KW breast cancer; therapy; ss.  
XX Homo sapiens.  
XX WO200105435-A2.  
XX 25-JAN-2001.  
XX 19-JUL-2000; 2000WO-CA000853.  
XX 19-JUL-1999; 99US-0144495P.  
XX (UYBR-) UNIV BRITISH COLUMBIA.  
XX (MIYA/) MIYAKE H.  
XX Gleave M;  
XX WPI; 2001-168448/17.  
XX Composition for treating hormone-regulated cancer, e.g. breast and  
PT prostatic tumors, comprising an antisense oligonucleotide that inhibits  
PT expression of insulin like growth factor binding protein-5 by hormone-  
PT regulated tumor cells.

XX PS Disclosure; Page 44; 45pp; English.  
XX CC This sequence represents an antisense oligonucleotide targeted against  
CC human insulin-like growth factor binding protein-5 (IGFBP-5). The  
CC invention relates to a composition for treatment of hormone-regulated  
CC cancer, comprising an antisense oligonucleotide (such as this sequence)  
CC which inhibits expression of IGFBP-5 by hormone-regulated tumour cells.  
CC The compositions is useful for delaying progression of hormone-regulated  
CC tumour cells such as prostatic cancer cells or breast cancer cells, to an  
CC androgen-independent state, by treating hormone sensitive tumour cells  
CC with the antisense sequence which inhibits expression of IGFBP-5 by the  
CC tumour cells. The composition can also be used for treating a hormone-  
CC responsive cancer in an individual, and administering the composition to  
CC the individual after initiation of hormone-withdrawal to induce apoptotic  
CC cell death of hormone-responsive tumour cells, and therefore delaying the  
CC progression of hormone-responsive cancer cells to a hormone-independent  
CC state in the individual. It can also be used for inhibiting or delaying  
CC metastatic boney progression of an IGF-1 sensitive tumour in a mammal, by  
CC administering the composition to inhibit the expression of IGFBP-5 by the  
CC hormone-responsive cancer cells, and therefore inhibiting or delaying  
CC metastatic boney progression of the tumour  
XX SQ Sequence 20 BP; 1 A; 10 C; 7 G; 2 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 643 GGGCTGGCCGAGAACCTGG 662  
Db 20 GGGCGCGGCCGAGAGCCTGG 1  
RESULT 4969  
AAA91233/c  
ID AAA91233 standard; DNA; 20 BP.  
XX AC AAA91233;  
XX 08-MAY-2001 (first entry)  
XX Antisense IGFBP-5 inhibitor #39.  
XX Insulin-like growth factor binding protein-5; IGFBP-5; human;  
KW antisense oligonucleotide; hormone-regulated cancer; prostatic cancer;  
KW breast cancer; therapy; ss.  
XX Homo sapiens.  
XX WO200105435-A2.  
XX 25-JAN-2001.  
XX 19-JUL-2000; 2000WO-CA000853.  
XX 19-JUL-1999; 99US-0144495P.  
XX (UYBR-) UNIV BRITISH COLUMBIA.  
XX (MIYA/) MIYAKE H.  
XX Gleave M;  
XX WPI; 2001-168448/17.  
XX Composition for treating hormone-regulated cancer, e.g. breast and  
PT prostatic tumors, comprising an antisense oligonucleotide that inhibits  
PT expression of insulin like growth factor binding protein-5 by hormone-  
PT regulated tumor cells.  
XX Disclosure; Page 40; 45pp; English.  
XX This sequence represents an antisense oligonucleotide targeted against



human insulin-like growth factor binding protein-5 (IGFBP-5). The invention relates to a composition for treatment of hormone-regulated cancer, comprising an antisense oligonucleotide (such as this sequence) which inhibits expression of IGFBP-5 by hormone-regulated tumour cells. The compositions is useful for delaying progression of hormone-regulated tumour cells such as prostatic cancer cells or breast cancer cells, to an androgen-independent state, by treating hormone sensitive tumour cells with the antisense sequence which inhibits expression of IGFBP-5 by the tumour cells. The composition can also be used for treating a hormone-responsive cancer in an individual, and administering the composition to the individual after initiation of hormone-withdrawal to induce apoptotic cell death of hormone-responsive tumour cells, and therefore delaying the progression of hormone-responsive cancer cells to a hormone-independent state in the individual. It can also be used for inhibiting or delaying metastatic boney progression of an IGF-1 sensitive tumour in a mammal, by administering the composition to inhibit the expression of IGFBP-5 by the hormone-responsive cancer cells, and therefore inhibiting or delaying metastatic boney progression of the tumour

Sequence 20 BP; 3 A; 5 C; 8 G; 4 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 543 CCCACCTCTCCGGCTGGAG 562  
||| | ||||| ||||| ||  
Db 20 CCCGCATCTCCGAGCTGAAG 1

RESULT 4970  
AAS01198  
ID AAS01198 standard; cDNA; 20 BP.  
XX  
AC AAS01198;  
XX  
DT 04-JUL-2001 (first entry)  
XX  
DE Human RAD51 antisense oligonucleotide, AS5.  
XX  
KW Human; Rad51; antisense; drug screening; cancer; autoimmune disease; arthriti; graft rejection; inflammatory bowel disease; surgery; angioplasty; ss.  
KW  
XX Homo sapiens.  
OS  
XX WO200119397-A1.  
PN  
XX  
PD 22-MAR-2001.  
XX  
PF 18-SEP-2000; 2000WO-US025838.  
XX  
PR 17-SEP-1999; 99US-0154616P.  
PR 06-DEC-1999; 99US-00455300.  
XX  
PA (PANG-) PANGENE CORP.  
XX  
PI Reddy G;  
XX  
DR WPI; 2001-244704/25.  
XX

Inhibiting cell proliferation for treating arthritis, graft rejection, inflammatory bowel disease, cancer, proliferation induced after medical procedure, involves administering Rad51 antibody or its fragment to cell.  
Example 6; Fig 16B; 102pp; English.

The sequence represents the human Rad51 antisense oligonucleotide, AS5. The antisense oligonucleotide is used to study down-regulation of Rad51 protein in human brain, breast and prostate cells. Rad51 protein is defective in repair of damaged DNA, genetic recombination and the recombinational repair of DNA lesions, and plays a central role in cancer. Inhibiting cell proliferation involves administering to a cell a

CC Rad51 antibody or its fragment. The Rad51 antibody or its fragment is useful for inhibiting cell proliferation, for treating disease states such as cancer, autoimmune disease, arthritis, graft rejection, CC inflammatory bowel disease, proliferation induced after medical CC procedures such as surgery, angioplasty etc. in humans and animals XX  
SQ Sequence 20 BP; 1 A; 8 C; 10 G; 1 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 563 GCGGGCGGTGAGCGCCCG 582  
||||| ||| |||||  
Db 1 GCGGGCGGTGGCAGCGCCCG 20

RESULT 4971  
AAI70304/c  
ID AAI70304 standard; DNA; 20 BP.  
XX

AC AAI70304;  
XX  
DT 07-JAN-2002 (first entry)  
XX  
DE Phage lambda vector primer J gene PCR primer CF1018.  
XX  
KW DNA polymerase; phage lambda; vector; J gene; PCR primer; ss.  
XX  
OS Bacteriophage lambda.  
XX  
PN EP1130118-A2.  
XX  
PD 05-SEP-2001.  
XX  
PF 16-FEB-1995; 2001EP-00113936.  
XX  
PR 25-FEB-1994; 94US-00203198.  
PR 16-FEB-1995; 95EP-00102141.  
XX  
PA (HOFF ) HOFFMANN LA ROCHE & CO AG F.  
XX  
PI Cheng S;  
XX  
DR WPI; 2001-640282/74.  
XX

New DNA polymerase composition consisting of a combination of a first DNA polymerase and a second DNA polymerase, useful for amplifying nucleic acids, particularly long nucleic acid sequences by PCR.

Example 1; Page 13; 26pp; English.

The invention provides a DNA polymerase composition for the PCR amplification of long (over 10 kb) nucleic acid sequences. The composition includes the DNA polymerase of Thermus thermophilus and a second, thermostable, DNA polymerase that provides 3'-to-5' exonuclease activity. Use of the composition was demonstrated for the amplification of inserts from phage lambda clones, with the second DNA polymerase provided by Thermotoga maritima. Primers CF1018 (present sequence) and CF1019 (see AAI70305) were designed from the J and cro genes of phage lambda. CF1018 corresponds to nucleotides 18892-18891 of the phage lambda genome, while CF1019 is complementary to nucleotides 38197-38217. Amplifications were carried out using randomly selected plaques from a human genomic library in lambda FIX II. Amplification products were analysed by gel electrophoresis following digestion with NotI to separate the insert from the flanking vector sequences. The presence of both vector fragments confirmed that the entire insert was amplified. The size of the amplified products ranged from less than 10 kb to greater than 20 kb; insert sizes of 9-23 kb are accommodated by this lambda vector

Sequence 20 BP; 6 A; 5 C; 7 G; 2 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;



Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 707 GACGACCAGCACCTGTTGCT 726  
Db 20 GATGCCAGCGCCTGTTCT 1

RESULT 4972  
AAC67211  
ID AAC67211 standard; DNA; 20 BP.  
XX  
AC AAC67211;  
XX  
DT 03-APR-2001 (first entry)  
XX  
DE Human E2F transcription factor 3 mRNA antisense sequence SEQ ID NO: 84.  
XX  
KW Human; E2F transcription factor 3; antisense; E2F-3; cancer;  
KW phosphorothioate backbone; infection; inflammation; PCR primer; ss.  
XX  
OS Homo sapiens.  
XX  
PN US6165791-A.  
XX  
PD 26-DEC-2000.  
XX  
PF 24-FEB-2000; 2000US-00513729.  
XX  
PR 24-FEB-2000; 2000US-00513729.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Popoff I, Wyatt J;  
XX  
DR WPI; 2001-101698/11.  
XX  
PT Novel antisense compounds targeted to E2F transcription factor 3 for  
PT diagnosis, prophylaxis and treatment of diseases associated with E2F  
PT transcription factor 3 such as infection, inflammation or tumor  
PT formation.  
XX  
PS Example 15; Col 45-46; 4lpp; English.  
XX  
CC The present invention provides antisense oligonucleotides with  
CC phosphorothioate backbones directed at the human E2F transcription factor  
CC 3 (E2F-3) coding sequences. These can be used in the therapy of diseases  
CC which can be treated by modulating E2F-3 expression and to prevent  
CC infection, inflammation and tumour formation  
XX  
SQ Sequence 20 BP; 4 A; 6 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 361 GCAGCTGGCCTACTCCAGT 380  
Db 1 GTAGTTGCCTACTCCCAAT 20

RESULT 4973  
AAF73008/c  
ID AAF73008 standard; DNA; 20 BP.  
XX  
AC AAF73008;  
XX  
DT 24-APR-2001 (first entry)  
XX  
DE Human daxx inhibitory antisense phosphorothioate oligonucleotide SEQ:109.  
XX  
KW Antisense oligonucleotide; daxx; inhibition; phosphorothioate;  
KW Fas binding protein; CENP-C binding protein; dap6; EAP; cytostatic;

antiinflammatory; death associated protein 6; Ets-1 associated protein;  
infection; inflammation; tumour formation; ss.

OS Homo sapiens.  
XX  
PN US6180353-B1.  
XX  
PD 30-JAN-2001.  
XX  
PF 24-JAN-2000; 2000US-00490692.  
XX  
PR 24-JAN-2000; 2000US-00490692.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Dean NM, Cowser LM;  
XX  
DR WPI; 2001-217744/22.  
XX  
PT Novel antisense compounds capable of modulating expression of daxx useful  
PT for diagnosis, prophylaxis and treatment of diseases associated with  
PT expression of daxx.  
XX  
PS Claim 1; Col 47; 59pp; English.  
XX  
CC The present invention describes an antisense compound (I) up to 30  
CC nucleobases in length, where (I) inhibits expression of daxx (also known  
CC as Fas binding protein, CENP-C binding protein, dap6 for death associated  
CC protein 6 and EAP for Ets-1 associated protein). (I) has cytostatic and  
CC antiinflammatory activity, and can be used in antisense therapy and as a  
CC modulator of daxx. (I) is useful for inhibiting the expression of daxx in  
CC cells or tissues in vitro. (I) can be utilised for diagnostics,  
CC therapeutics for the treatment of diseases associated with the expression  
CC of daxx, prophylaxis e.g. to prevent or delay infection, inflammation or  
CC tumour formation and as research reagent. The present sequence represents  
CC an inhibitory human daxx antisense phosphorothioate oligonucleotide which  
CC is used in the exemplification of the present invention

XX  
SQ Sequence 20 BP; 8 A; 6 C; 5 G; 1 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1992 TGTGTAICTAGCTTCTTCAG 2011  
Db 20 TGTGTTCTGGCCTCTGCAG 1

RESULT 4974  
AAD11311/c  
ID AAD11311 standard; DNA; 20 BP.  
XX  
AC AAD11311;  
XX  
DT 24-SEP-2001 (first entry)  
XX  
DE Human cot oncogene antisense oligonucleotide, ISIS 116352.  
XX  
KW Human; cot oncogene; antisense therapy; inflammation; cancer; antisense;  
KW immune system disorder; prophylaxis; cytostatic; immunomodulator; Tpl-2;  
KW est; phosphorothioate backbone; untranslated region; UTR; ss.  
XX  
OS Homo sapiens.  
OS Synthetic.  
XX  
FH Key Location/Qualifiers  
FT modified\_base 1..20  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "Phosphorothioate backbone"  
FT modified\_base 1..5  
FT /\*tag= b

FT /mod\_base= OTHER  
FT /note= "2'-methoxyethyl residues"  
FT 8  
FT modified\_base  
FT /\*tag= c  
FT /mod\_base= m5c  
FT 10  
FT modified\_base  
FT /\*tag= d  
FT /mod\_base= m5c  
FT 16..20  
FT /\*tag= e  
FT /mod\_base= OTHER  
FT /note= "2'-methoxyethyl residues"  
XX  
XX  
PN US6265216-B1.  
XX  
XX  
PD 24-JUL-2001.  
XX  
XX  
PF 20-JAN-2000; 2000US-00489868.  
XX  
PR 20-JAN-2000; 2000US-00489868.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Bennett CF, Wyatt J;  
XX  
XX WPI; 2001-463936/50.  
DR  
XX  
XX  
PT New antisense oligonucleotides for modulating cot oncogene expression,  
PT particularly useful for diagnosing or treating diseases associated with  
PT expression of cot oncogene, such as inflammation, cancer or immune system  
PT disorders.  
XX  
XX  
PS Claim 3; Col 40; 39pp; English.  
XX

CC The invention relates to antisense oligonucleotides, compositions and  
CC methods for modulating cot oncogene expression. The cot oncogene is also  
CC known as Tpl-2 and est. The compositions comprise antisense compounds,  
CC particularly antisense oligonucleotides, targetted to nucleic acids  
CC encoding cot oncogene. The antisense oligonucleotides are useful for  
CC modulating the expression of cot oncogene and for treating diseases  
CC associated with expression of cot oncogene, e.g. inflammation, cancer or  
CC disorders of the immune system. The antisense oligonucleotides are also  
CC useful for diagnosis or prophylaxis or as research reagents and kits. The  
CC present sequence is human cot oncogene antisense oligonucleotide, ISIS  
CC 116352. This sequence was targetted towards the 5' untranslated region  
CC (UTR) of human cot oncogene  
XX

SQ Sequence 20 BP; 4 A; 2 C; 9 G; 5 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1051 ACCCGCTCATGTGACTCTCC 1070  
| | | | | | | | | | | | | | | |  
Db 20 ACCACCTCATGAGACTCTCC 1

RESULT 4975  
AAC92738  
ID AAC92738 standard; DNA; 20 BP.  
XX  
AC AAC92738;  
XX  
DT 27-MAR-2001 (first entry)  
XX  
DE Human hnRNP A1 phosphorothioate antisense oligonucleotide, SEQ ID NO:10.  
XX  
KW Human hnRNP A1; heterogeneous nuclear ribonucleoprotein A1;  
KW heterogeneous nuclear ribonucleoprotein core protein A1; p40CRS;  
KW mRNA processing; transport; stabilisation; alternative splicing;  
KW donor splice site selection; telomere biogenesis; oncogenesis;  
KW apoptosis-associated protein; cancer; tumour formation;

KW expression inhibition; phosphorothioate; antisense oligonucleotide; ss.  
XX  
OS Homo sapiens.  
XX  
PN US6165789-A.  
XX  
PD 26-DEC-2000.  
XX  
XX 27-OCT-1999; 99US-00428696.  
PF  
XX 27-OCT-1999; 99US-00428696.  
PR  
XX (ISIS-) ISIS PHARM INC.  
PA  
XX Monia BP, Cowsert LM;  
PI  
XX WPI; 2001-090484/10.  
DR  
XX  
XX  
PT Novel antisense compound targeted to human hnRNP A1 which specifically  
PT hybridizes with and inhibits the expression of human hnRNP A1, useful for  
PT modulating the expression of hnRNP A1 in cells.

Example 15; Col 39-40; 38pp; English.

CC Sequences AAC92738-C92817 represent antisense oligonucleotides targetted  
CC to the heterogeneous nuclear ribonucleoprotein A1 (hnRNP A1) gene, which  
CC inhibit its expression. The antisense oligonucleotides were designed to  
CC target different regions of the human hnRNP A1 mRNA, and were analysed  
CC for their effect on hnRNP A1 mRNA levels by quantitative real-time PCR.  
CC hnRNP A1 (also known as heterogeneous nuclear ribonucleoprotein core  
CC protein A1 and p40CRS) is thought to function in the stabilisation,  
CC transport and processing (including alternative splicing) of newly  
CC synthesised mRNAs. It facilitates the annealing of single-stranded  
CC nucleic acids, modulates the binding of snRNPs to RNA intron sequences,  
CC and shuttles continuously between the nucleus and the cytoplasm acting as  
CC a carrier protein for mRNAs. hnRNP A1 also participates in telomere  
CC biogenesis, with low levels of hnRNP correlating with shortened  
CC telomeres. In addition, hnRNP A1 has also been classified as an apoptosis  
CC -associated protein on the basis that it is specifically cleaved into  
CC three fragments during antibody-mediated apoptosis. Due to its ability to  
CC control splicing events, particularly donor splice site selection, hnRNP  
CC A1 is implicated in the process of oncogenesis. The oligonucleotides of  
CC the invention are useful for diagnosis, prevention and treatment of  
CC conditions associated with hnRNP A1 expression, such as cancer

XX Sequence 20 BP; 2 A; 11 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 336 CACCTACTTTCCCTCC 355  
| | | | | | | | | | | | | | | |  
Db 1 CAGCTACCTTCGCCCTCTC 20

RESULT 4976  
AAH57066  
ID AAH57066 standard; DNA; 20 BP.  
XX  
AC AAH57066;  
XX  
DT 10-SEP-2001 (first entry)  
XX  
DE Human oestrogen receptor alpha probe oligonucleotide 11.  
XX  
KW Ligand dependent transcriptional factor; oestrogen receptor; ER;  
KW glucocorticoid receptor protein; GR; mineralocorticoid receptor protein;  
KW MR; peroxisome proliferator-activated receptor protein; PPAR;  
KW progesterone receptor protein; PR; pregnane X receptor protein; PXR;  
KW thyroid hormone receptor protein; TR; vitamin D receptor protein; VDR;  
KW transactivation; ERalpha; breast cancer; PCR primer; probe; ss.

OS Homo sapiens.  
XX WO200142307-A1.  
PN 14-JUN-2001.  
XX 01-DEC-2000; 2000WO-JP008553.  
PF 07-DEC-1999; 99JP-00348022.  
XX 27-DEC-1999; 99JP-00370667.  
XX 07-JUL-2000; 2000JP-00207011.  
XX 21-JUL-2000; 2000JP-00220508.  
XX 02-AUG-2000; 2000JP-00234053.  
XX 03-AUG-2000; 2000JP-00235460.  
XX 03-AUG-2000; 2000JP-00235461.  
XX 03-AUG-2000; 2000JP-00235463.  
XX (SUMO ) SUMITOMO CHEM CO LTD.  
PA Saito K, Ohe N, Satoh H;  
XX WPI; 2001-367866/38.  
XX  
XX Ligand dependent transcriptional factors, nucleic acids encoding them and  
PT cells comprising them and a specified reporter gene, useful for screening  
PT agents for the treatment of breast cancer.  
XX  
PS Disclosure; Page 237; 276pp; English.  
XX  
XX The present invention relates to ligand dependent transcriptional factors  
CC including oestrogen receptor (ER) alpha and beta protein, glucocorticoid  
CC receptor protein (GR), mineralocorticoid receptor protein (MR),  
CC peroxisome proliferator-activated receptor protein (PPAR), progesterone  
CC receptor protein (PR), pregnane X receptor protein (PXR), thyroid hormone  
CC receptor protein (TR) and vitamin D receptor protein (VDR), the nucleic  
CC acids encoding them and cells comprising them and a specified reporter  
CC gene for the ligand dependent transcriptional factor. These proteins are  
CC useful in the modulation of ligand dependent transcriptional factor  
CC activity. The cells, mutant ERalpha and the polynucleotide encoding it  
CC may be used in assays for qualitatively analysing an activity for  
CC transactivation of a reporter gene by a test ERalpha, for screening  
CC mutant ligand dependent transcriptional factors, for evaluating an  
CC activity for transactivation of a reporter gene by a test ERalpha and/or  
CC for screening a compound useful for treating a disorder of a mutant  
CC ERalpha, especially breast cancer  
XX  
SQ Sequence 20 BP; 2 A; 9 C; 5 G; 4 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 369 CCTACTCCAGTCGCGCCGAC 388  
||| ||||| ||||| ||||| |||||  
Db 1 CCTTGTCCTGACGCGCCGAC 20  
  
RESULT 4977  
AAH57065  
ID AAH57065 standard; DNA; 20 BP.  
XX  
AC AAH57065;  
XX  
DT 10-SEP-2001 (first entry)  
XX  
DE Human oestrogen receptor alpha probe oligonucleotide 10.  
XX  
XX Ligand dependent transcriptional factor; oestrogen receptor; ER;  
KW glucocorticoid receptor protein; GR; mineralocorticoid receptor protein;  
KW MR; peroxisome proliferator-activated receptor protein; PPAR;  
KW progesterone receptor protein; PR; pregnane X receptor protein; PXR;  
KW thyroid hormone receptor protein; TR; vitamin D receptor protein; VDR;  
KW transactivation; ERalpha; breast cancer; PCR primer; probe; ss.

XX Homo sapiens.  
XX WO200142307-A1.  
PN 14-JUN-2001.  
XX 01-DEC-2000; 2000WO-JP008553.  
PF 07-DEC-1999; 99JP-00348022.  
XX 27-DEC-1999; 99JP-00370667.  
XX 07-JUL-2000; 2000JP-00207011.  
XX 21-JUL-2000; 2000JP-00220508.  
XX 02-AUG-2000; 2000JP-00234053.  
XX 03-AUG-2000; 2000JP-00235460.  
XX 03-AUG-2000; 2000JP-00235461.  
XX 03-AUG-2000; 2000JP-00235463.  
XX (SUMO ) SUMITOMO CHEM CO LTD.  
PA Saito K, Ohe N, Satoh H;  
XX WPI; 2001-367866/38.  
XX  
XX Ligand dependent transcriptional factors, nucleic acids encoding them and  
PT cells comprising them and a specified reporter gene, useful for screening  
PT agents for the treatment of breast cancer.  
XX  
PS Disclosure; Page 236; 276pp; English.  
XX  
XX The present invention relates to ligand dependent transcriptional factors  
CC including oestrogen receptor (ER) alpha and beta protein, glucocorticoid  
CC receptor protein (GR), mineralocorticoid receptor protein (MR),  
CC peroxisome proliferator-activated receptor protein (PPAR), progesterone  
CC receptor protein (PR), pregnane X receptor protein (PXR), thyroid hormone  
CC receptor protein (TR) and vitamin D receptor protein (VDR), the nucleic  
CC acids encoding them and cells comprising them and a specified reporter  
CC gene for the ligand dependent transcriptional factor. These proteins are  
CC useful in the modulation of ligand dependent transcriptional factor  
CC activity. The cells, mutant ERalpha and the polynucleotide encoding it  
CC may be used in assays for qualitatively analysing an activity for  
CC transactivation of a reporter gene by a test ERalpha, for screening  
CC mutant ligand dependent transcriptional factors, for evaluating an  
CC activity for transactivation of a reporter gene by a test ERalpha and/or  
CC for screening a compound useful for treating a disorder of a mutant  
CC ERalpha, especially breast cancer  
XX  
SQ Sequence 20 BP; 1 A; 8 C; 6 G; 5 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 365 CTGGCCTACTCCAGTCGGC 384  
||||| ||||| ||||| |||||  
Db 1 CTGGCCTTGTCCCTGACGGC 20  
  
RESULT 4978  
AAH91571  
ID AAH91571 standard; DNA; 20 BP.  
XX  
AC AAH91571;  
XX  
DT 22-AUG-2001 (first entry)  
XX  
DE Adaptor molecule #926.  
XX  
KW Adaptor molecule; nucleic acid fragment detection; genome analysis;  
KW polymorphism detection; ss.  
XX  
OS Synthetic.  
XX

PN WO200140508-A1.  
XX 07-JUN-2001.  
PD  
XX  
PF 01-DEC-2000; 2000WO-AU001484.  
XX  
PR 01-DEC-1999; 99AU-00004396.  
XX  
PA (UNSY ) UNIV SYDNEY.  
XX  
PI Reeves PR;  
XX  
XX WPI; 2001-374855/39.  
XX  
PT Adaptor molecules for detecting genetic polymorphisms by amplified  
PT fragment length polymorphism finger-printing, have two hybridized strands  
PT and extension sequence of second strand hybridizes to a further strand.  
XX  
PS Claim 37; Fig 9; 43pp; English.  
XX  
CC This sequence is an example of an adaptor molecule of the invention. The  
CC adaptor molecules (M1 and M2) are detecting nucleic acid fragments. The  
CC molecules comprise first and second strands (S1 and S2) which are  
CC hybridised to each other so that an extension sequence (ES) of (S2)  
CC extends from the nucleotide of (S2) which is hybridised with the 3'  
CC terminal nucleotide of (S1) and ES in use being capable of hybridising to  
CC a further strand. The adaptor molecules are useful for detecting a  
CC nucleic acid molecule which has hetero ends in a sample of nucleic acid  
CC molecules, for detecting a polymorphism in a genome. The advantage of  
CC (M1) and (M2) is that a hot start step can be incorporated prior to the  
CC synthesis of the third strand. The hot start step involves heating the  
CC sample of nucleic acid prior to a temperature which prevents activity of  
CC a polymerase in the sample before the first primer is hybridised. This  
CC increases the specificity of the primer  
XX  
SQ Sequence 20 BP; 6 A; 4 C; 5 G; 5 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 810 GGGCCGTAATGAACCCCACT 829  
Db || ||||| ||||| ||||| |||||  
1 GGATGGTAATGAACCTCACT 20  
  
RESULT 4979  
AAF59983/C  
ID AAF59983 standard; DNA; 20 BP.  
XX  
AC AAF59983;  
XX  
DT 22-MAY-2001 (first entry)  
XX  
DE Rabbit beta-globin interrogation probe 10665, SEQ ID NO:19.  
XX  
KW Nucleoside diphosphate kinase; NDPK; thermostable; PfuNDPK;  
KW nucleic acid detection; hybrid detection; pyrophosphorolysis;  
KW DNA depolymerisation; rabbit beta-globin hybridisation probe; ss.  
XX  
OS Oryctolagus cuniculus.  
XX  
XX WO200107580-A1.  
XX  
PD 01-FEB-2001.  
XX  
PF 18-FEB-2000; 2000WO-US004206.  
XX  
PR 21-JUL-1999; 99US-00358972.  
XX  
XX (PROM-) PROMEGA CORP.  
PA  
PI Andrews CA, Hartnett JR;

XX WPI; 2001-182784/18.  
DR  
XX  
PT New thermostable nucleoside diphosphate kinase enzyme useful for nucleic  
PT acid detection and in a one-step or a one-pot pyrophosphorolysis method  
PT of depolymerization.  
XX  
PS Example 4; Page 58; 101pp; English.  
XX  
CC The invention relates to novel thermostable nucleoside diphosphate  
CC kinases (NDPK) from Pyrococcus furiosus (AAB60679, AAB60683) and to DNA  
CC sequences which encode them (AAF59974, AAF59978, AAF59989, AAF59990,  
CC AAF59991). The novel nucleoside diphosphate kinases (PfuNDPK-2 and  
CC PfuNDPK-1) are identical in sequence, except that PfuNDPK-2 contains an  
CC additional five residues at the N-terminus. The novel NDPKs both exhibit  
CC higher NDPK activity at a temperature of about 50-90 degrees C relative  
CC to the NDPK activity at 37 degrees C. The invention also relates to  
CC expression vectors and host cells comprising a PfuNDPK-encoding nucleic  
CC acid; a method for the recombinant production of a PfuNDPK of the  
CC invention; and a composition for determining the presence or absence of  
CC a predetermined nucleic acid target sequence in a sample, comprising a  
CC PfuNDPK of the invention and a probe complementary to the target  
CC sequence. The thermostable NDPKs are useful in methods for the detection  
CC of nucleic acids, particularly for determining the presence or absence of  
CC a predetermined nucleic acid sequence in a nucleic acid sample. The  
CC enzymes are useful in a one-step or a one-pot pyrophosphorolysis method  
CC of depolymerisation. The PfuNDPK enzymes provide for the highly sensitive  
CC detection of nucleic acid hybrids without the need for radiochemicals or  
CC electrophoresis. The PfuNDPK enzymes can be used in conjunction with high  
CC temperature amplification without a substantial loss of NDPK activity.  
CC The enzyme is useful in high throughput robotically-manipulated  
CC procedures because greater enzymatic stability is retained at room  
CC temperatures. Sequences AAF59981-AAF59986 represents rabbit beta-globin  
CC hybridisation probes used with a PfuNDPK in an assay for native and  
CC mutant rabbit beta-globin sequences in an exemplification of the  
CC invention  
XX  
SQ Sequence 20 BP; 3 A; 8 C; 2 G; 7 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 886 CAAAGTCACAGTGGCTGAAG 905  
Db ||||| ||||| ||||| |||||  
20 CAAGGTGAACGTGGATGAAG 1  
  
RESULT 4980  
AAH25808  
ID AAH25808 standard; DNA; 20 BP.  
XX  
AC AAH25808;  
XX  
DT 20-AUG-2001 (first entry)  
XX  
DE Human ibai DNA PCR primer #1.  
XX  
KW Human; mouse; immunomodulatory; monocyte; macrophage; inhibitor;  
KW PCR primer; ss.  
XX  
OS Homo sapiens.  
XX  
PN JP2001078775-A.  
XX  
PD 27-MAR-2001.  
XX  
PF 14-SEP-1999; 99JP-00260793.  
XX  
PR 14-SEP-1999; 99JP-00260793.  
XX  
PA (KOKU-) KOKURITSU SEISHIN SHINKEI CENT SOCHO.  
PA (IYAK-) IYAKUHIN FUKUSAYO HIGAI KYUSAI KENKYU SH.



PA (MOCH ) MOCHIDA PHARM CO LTD.  
XX  
DR WPI; 2001-313369/33.  
XX  
PT A macrophage function modifier useful for preventing and treating  
PT diseases caused by the increase or decrease in macrophage activity or  
PT function.  
XX  
PS Example 1; Page 8; 20pp; Japanese.  
XX  
CC The present invention provides a number of murine and human Iba1  
CC derivatives, which are capable of inhibiting the function of cells with  
CC monocyte or macrophage activity. These can be used as immunomodulators to  
CC prevent and treat diseases caused by a decrease or increase in the  
CC activity or the function of macrophages or an activator or an inhibitor  
CC of the function of cells of macrophage type. The present sequence is a  
CC PCR primer used in the exemplification of the invention  
XX  
SQ Sequence 20 BP; 4 A; 11 C; 1 G; 4 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
Qy 346 TCCCCCTCCCTACCAGCAGC 365  
Db 1 TCCCCACCTCTACCAGCATC 20  
  
RESULT 4981  
AAH25827  
ID AAH25827 standard; DNA; 20 BP.  
XX  
AC AAH25827;  
XX  
DT 20-AUG-2001 (first entry)  
XX  
DE Adipogenesis inhibitory factor related oligonucleotide #5.  
XX  
KW Human; adipogenesis inhibitory factor; ADIF; obesity; primer; ss.  
XX  
OS Synthetic.  
XX  
PN JP2001078777-A.  
XX  
PD 27-MAR-2001.  
XX  
PF 16-SEP-1999; 99JP-00262777.  
XX  
PR 16-SEP-1999; 99JP-00262777.  
XX  
PA (SNOW ) SNOW BRAND MILK PROD CO LTD.  
XX  
DR WPI; 2001-313370/33.  
XX  
PT Novel adipogenesis inhibitory factor useful for treatment and/or the  
PT prevention of fatness and as antigen for establishing immunological  
PT diagnosis.  
XX  
PS Example 12; Page 14; 19pp; Japanese.  
XX  
CC The present invention describes a human adipogenesis inhibitory factor,  
CC shown in AAB98971. This can be used as a drug composition for the  
CC treatment and prevention of obesity and as an antigen for establishing  
CC immunological diagnosis. The present sequence is an oligonucleotide used  
CC in the exemplification of the invention  
XX  
SQ Sequence 20 BP; 4 A; 6 C; 6 G; 4 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 712 CCAGCACCTGTTGCTGCACG 731  
Db 1 CAAGGACTTGCTGCTGCACG 20  
  
RESULT 4982  
AAH56682  
ID AAH56682 standard; DNA; 20 BP.  
XX  
AC AAH56682;  
XX  
DT 06-SEP-2001 (first entry)  
XX  
DE Streptococcus pyogenes groEL antisense oligonucleotide SEQ ID NO:330.  
XX  
KW Antisense oligonucleotide; groE; groEL; groES; inhibitor; growth;  
KW microorganism; Escherichia coli; Streptococcus pneumoniae; diagnosis;  
KW Streptococcus pyogenes; Staphylococcus aureus; Pseudomonas aeruginosa;  
KW antibacterial; antiviral; antiproliferative; antisense therapy;  
KW microbial infection; ss.  
XX  
KW Streptococcus pyogenes.  
OS  
XX WO200136625-A2.  
PN  
XX 25-MAY-2001.  
PD  
XX 20-NOV-2000; 2000WO-CA001347.  
PF  
XX 18-NOV-1999; 99US-0166249P.  
PR  
XX (GENE-) GENESENSE TECHNOLOGIES INC.  
PA  
XX Wright JA, Young AH, Dugourd D;  
PI  
XX WPI; 2001-355633/37.  
DR  
XX  
XX  
PT Novel antisense compounds targeting nucleic acid encoding groEL or groES  
PT gene of microorganism, which hybridize with and inhibit expression of the  
PT genes, useful to inhibit growth of microorganism having the genes.  
XX  
PS Claim 3; Page 50; 110pp; English.  
XX  
CC The present invention specifically claims AAH56368 to AAH56832 which are  
CC antisense oligonucleotides to nucleotide sequences encoding groE. More  
CC generally, antisense compounds (I) comprising antisense oligonucleotides  
CC of 5-50 bases targeted to a nucleotide sequence encoding groEL (heat  
CC shock protein (HSP)60) (GL) and groES (HSP10) (GS) gene from a  
CC microorganism, where the antisense compound is complementary to GL or GS  
CC of a microorganism and specifically hybridizes with and inhibits the  
CC expression of GL or GS, is claimed. (I) have antibacterial, antiviral and  
CC antiproliferative activities, and can be used in antisense therapy and  
CC for inhibiting expression of groES or groEL. (I) are useful for  
CC inhibiting expression of GL or GS in cells or tissues in vitro. (I) are  
CC also useful for inhibiting the growth of a microorganism, or inhibiting  
CC the expression of GL or GS gene in a microorganism (a bacterial cell or a  
CC virus) having a GL or GS gene which involves administering to the  
CC microorganism or to a cell infected with the microorganism, (I). (I) are  
CC also useful for treating a mammalian pathological condition mediated by  
CC the microorganisms which involves identifying a eukaryotic organism  
CC having a pathological condition mediated by microorganisms having a GL or  
CC GS gene and administering (I) such that the growth of microorganism is  
CC inhibited. The antisense compounds are utilised for diagnostics,  
CC therapeutics, prophylaxis and as research reagents and kits, e.g., to  
CC prevent or delay microbial infections in humans. They are also useful as  
CC molecular weight markers. AAH56362 to AAH56367 and AAH56833 to AAH56854  
CC represent PCR primers for groE sequences which are used in the  
CC exemplification of the present invention. AAH56855 to AAH56870 represent  
CC groE nucleotide sequence given in the present invention  
XX  
SQ Sequence 20 BP; 2 A; 5 C; 0 G; 13 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 4.5e+03;		SQ Sequence 20 BP; 8 A; 6 C; 1 G; 5 T; 0 U; 0 Other;	
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;		Query Match 0.5%; Score 13.6; DB 1; Length 20;	
		Best Local Similarity 80.0%; Pred. No. 4.5e+03;	
		Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;	
QY	2157 TTTTCTCCTTTTCTTTT 2176	QY	1913 AACAAATACCTTTTTCAG 1932
DB	1 TTTTACCCCTTTTCTTAT 20	DB	1 AACAAATACCTTCTTCAACAG 20
RESULT 4983		AAH56423/c	
ID	AAH56570 standard; DNA; 20 BP.	ID	AAH56423 standard; DNA; 20 BP.
XX		XX	
AC	AAH56570;	AC	AAH56423;
XX		XX	
DT	06-SEP-2001 (first entry)	DT	06-SEP-2001 (first entry)
XX		XX	
DE	S. pneumoniae groE operon antisense oligonucleotide SEQ ID NO:218.	DE	Escherichia coli groE operon antisense oligonucleotide SEQ ID NO:71.
XX		XX	
KW	Antisense oligonucleotide; groE; groEL; groES; inhibitor; growth;	KW	Antisense oligonucleotide; groE; groEL; groES; inhibitor; growth;
KW	microorganism; Escherichia coli; Streptococcus pneumoniae; diagnosis;	KW	microorganism; Escherichia coli; Streptococcus pneumoniae; diagnosis;
KW	Streptococcus pyogenes; Staphylococcus aureus; Pseudomonas aeruginosa;	KW	Streptococcus pyogenes; Staphylococcus aureus; Pseudomonas aeruginosa;
KW	antibacterial; antiviral; antiproliferative; antisense therapy;	KW	antibacterial; antiviral; antiproliferative; antisense therapy;
KW	microbial infection; ss.	KW	microbial infection; ss.
XX		XX	
OS	Streptococcus pneumoniae.	OS	Escherichia coli.
XX		XX	
PN	WO200136625-A2.	PN	WO200136625-A2.
XX		XX	
PD	25-MAY-2001.	PD	25-MAY-2001.
XX		XX	
PF	20-NOV-2000; 2000WO-CA001347.	PF	20-NOV-2000; 2000WO-CA001347.
XX		XX	
PR	18-NOV-1999; 99US-0166249P.	PR	18-NOV-1999; 99US-0166249P.
XX		XX	
PA	(GENE-) GENESENSE TECHNOLOGIES INC.	PA	(GENE-) GENESENSE TECHNOLOGIES INC.
XX		XX	
PI	Wright JA, Young AH, Dugourd D;	PI	Wright JA, Young AH, Dugourd D;
XX		XX	
DR	WPI; 2001-355633/37.	DR	WPI; 2001-355633/37.
XX		XX	
PT	Novel antisense compounds targeting nucleic acid encoding groEL or groES	PT	Novel antisense compounds targeting nucleic acid encoding groEL or groES
PT	gene of microorganism, which hybridize with and inhibit expression of the	PT	gene of microorganism, which hybridize with and inhibit expression of the
PT	genes, useful to inhibit growth of microorganism having the genes.	PT	genes, useful to inhibit growth of microorganism having the genes.
XX		XX	
PS	Claim 3; Page 46; 110pp; English.	PS	Claim 3; Page 41; 110pp; English.
XX		XX	
CC	The present invention specifically claims AAH56368 to AAH56832 which are	CC	The present invention specifically claims AAH56368 to AAH56832 which are
CC	antisense oligonucleotides to nucleotide sequences encoding groE. More	CC	antisense oligonucleotides to nucleotide sequences encoding groE. More
CC	generally, antisense compounds (I) comprising antisense oligonucleotides	CC	generally, antisense compounds (I) comprising antisense oligonucleotides
CC	of 5-50 bases targeted to a nucleotide sequence encoding groEL (heat	CC	of 5-50 bases targeted to a nucleotide sequence encoding groEL (heat
CC	shock protein (HSP)60) (GL) and groES (HSP10) (GS) gene from a	CC	shock protein (HSP)60) (GL) and groES (HSP10) (GS) gene from a
CC	microorganism, where the antisense compound is complementary to GL or GS	CC	microorganism, where the antisense compound is complementary to GL or GS
CC	of a microorganism and specifically hybridizes with and inhibits the	CC	of a microorganism and specifically hybridizes with and inhibits the
CC	expression of GL or GS, is claimed. (I) have antibacterial, antiviral and	CC	expression of GL or GS, is claimed. (I) have antibacterial, antiviral and
CC	antiproliferative activities, and can be used in antisense therapy and	CC	antiproliferative activities, and can be used in antisense therapy and
CC	for inhibition of expression of groES or groEL. (I) are useful for	CC	for inhibition of expression of groES or groEL. (I) are useful for
CC	inhibiting expression of GL or GS in cells or tissues in vitro. (I) are	CC	inhibiting expression of GL or GS in cells or tissues in vitro. (I) are
CC	also useful for inhibiting the growth of a microorganism, or inhibiting	CC	also useful for inhibiting the growth of a microorganism, or inhibiting
CC	the expression of GL or GS gene in a microorganism (a bacterial cell or a	CC	the expression of GL or GS gene in a microorganism (a bacterial cell or a
CC	virus) having a GL or GS gene which involves administering to the	CC	virus) having a GL or GS gene which involves administering to the
CC	microorganism or to a cell infected with the microorganism, (I). (I) are	CC	microorganism or to a cell infected with the microorganism, (I). (I) are
CC	also useful for treating a mammalian pathological condition mediated by	CC	also useful for treating a mammalian pathological condition mediated by
CC	the microorganisms which involves identifying a eukaryotic organism	CC	the microorganisms which involves identifying a eukaryotic organism
CC	having a pathological condition mediated by microorganisms having a GL or	CC	having a pathological condition mediated by microorganisms having a GL or
CC	GS gene and administering (I) such that the growth of microorganism is	CC	GS gene and administering (I) such that the growth of microorganism is
CC	inhibited. The antisense compounds are utilised for diagnostics,	CC	inhibited. The antisense compounds are utilised for diagnostics,
CC	therapeutics, prophylaxis and as research reagents and kits, e.g., to	CC	therapeutics, prophylaxis and as research reagents and kits, e.g., to
CC	prevent or delay microbial infections in humans. They are also useful as	CC	prevent or delay microbial infections in humans. They are also useful as
CC	molecular weight markers. AAH56362 to AAH56367 and AAH56833 to AAH56854	CC	molecular weight markers. AAH56362 to AAH56367 and AAH56833 to AAH56854
CC	represent PCR primers for groE sequences which are used in the	CC	represent PCR primers for groE sequences which are used in the
CC	exemplification of the present invention. AAH56855 to AAH56870 represent	CC	exemplification of the present invention. AAH56855 to AAH56870 represent
CC	groE nucleotide sequence given in the present invention	CC	represent PCR primers for groE sequences which are used in the
XX		XX	

```
CC exemplification of the present invention. AAH56855 to AAH56870 represent
CC groE nucleotide sequence given in the present invention
XX
SQ Sequence 20 BP; 3 A; 4 C; 0 G; 13 T; 0 U; 0 Other;
    Query Match      0.5%; Score 13.6; DB 1; Length 20;
    Best Local Similarity 80.0%; Pred. No. 4.5e+03;
    Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 2778 TAGAATTGAAAAA 2797
Db 20 TTGAATGAAGAGAAAAA 1

RESULT 4985
AAF80839/c
ID AAF80839 standard; DNA; 20 BP.
XX
AC AAF80839;
XX
DT 02-MAY-2001 (first entry)
XX
DE Human mdm2 phosphorothioate oligonucleotide #213.
XX
KW Antisense; mdm2; hyperproliferation; cancer; psoriasis; ss.
XX
OS Homo sapiens.
XX
PN US6184212-B1.
XX
PD 06-FEB-2001.
XX
PF 26-MAR-1999; 99US-00280805.
XX
PR 26-MAR-1998; 98US-00048810.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Miraglia LJ, Nero P, Graham MJ, Monia BP, Cowsert LM;
XX
WPI; 2001-190948/19.
XX
Novel antisense compound 8-30 nucleobases in length targeted to a nucleic
acid molecule encoding human mdm-2 useful for modulating the expression
of human mdm-2 and reducing hyperproliferation of human cells.
XX
Example 9; Col 31; 77pp; English.
XX
The present invention relates to an antisense compound 8-30 nucleobases
in length targeted to nucleobases 1-308 of the 5' untranslated region,
1776-1806 of the translation termination codon region or 1818-2370 of the
3' untranslated region of a nucleic acid molecule encoding human mdm-2.
XX
The invention is useful for reducing hyperproliferation of human cells,
modulating the expression of mdm2 in human cells or tissues or in vitro.
XX
The hyperproliferative disorder includes cancer or psoriasis
SQ Sequence 20 BP; 8 A; 1 C; 3 G; 8 T; 0 U; 0 Other;
    Query Match      0.5%; Score 13.6; DB 1; Length 20;
    Best Local Similarity 80.0%; Pred. No. 4.5e+03;
    Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 2520 TTTATTTCATATATACAGG 2539
Db 20 TTTATTTCATATATCAAG 1

RESULT 4986
AAS10664
ID AAS10664 standard; DNA; 20 BP.
XX
AC AAS10664;
XX
```

```
DT 24-OCT-2001 (first entry)
XX
DE Human caspase 3 antisense oligonucleotide 108988.
XX
KW Human; caspase 3; apoptosis; hyperproliferative disorder; hepatitis;
KW viral infection; haematopoietic disorder; autoimmune disorder;
KW atherosclerosis; neurological disorder; antisense; phosphorothioate; ss.
XX
OS Homo sapiens.
XX
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod base= OTHER
FT /note= "OTHER= phosphorothioate internucleotide linkages.
FT Some bases especially bases 1-5 and bases 16-20 are 2'-
FT methoxyethyl (2'-MOE) bases, bases 6-15 are 2'-
FT deoxynucleotides and all cytidine bases are 5'-
FT methylcytidines"
XX
PN WO200153310-A1.
XX
PD 26-JUL-2001.
XX
PF 11-JAN-2001; 2001WO-US000888.
XX
PR 18-JAN-2000; 2000US-00484617.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Zhang H, Cowsert LM;
XX
WPI; 2001-442252/47.
XX
New antisense compound to inhibit caspase 3 is useful for treating
hepatitis and atherosclerosis.
XX
Claim 3; Page 87; 127pp; English.
XX
The present sequence for human caspase 3 antisense oligonucleotide 108988
is 1 of various novel antisense oligonucleotides (AAS10517-AAS10676)
described in the present invention. Also described are methods of using
these compounds for the modulation of caspase 3 expression. The caspase 3
antisense oligonucleotides specifically hybridise with and inhibit the
expression of caspase 3. Antisense compounds targeted to caspase 3 are
useful to inhibit caspase 3 expression in cells or tissues and to
modulate apoptosis. The caspase 3 antisense oligonucleotides are useful
for treating disorders associated with expression of caspase 3. Such
disorders include hyperproliferative disorders (e.g. cancer), viral
infections (e.g. hepatitis), haematopoietic disorders, autoimmune
disorders, atherosclerosis and neurological disorders (e.g. Alzheimer's
disease)
XX
SQ Sequence 20 BP; 4 A; 5 C; 3 G; 8 T; 0 U; 0 Other;
    Query Match      0.5%; Score 13.6; DB 1; Length 20;
    Best Local Similarity 80.0%; Pred. No. 4.5e+03;
    Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1742 GACAAGTACTGCTCTTAT 1761
Db 1 GACAGTTACTTGCTCCTTAT 20

RESULT 4987
AAF29930
ID AAF29930 standard; DNA; 20 BP.
XX
AC AAF29930;
XX
DT 04-APR-2001 (first entry)
XX
DE Human estrogen receptor alpha isoform primer #5.
```

XX Human; estrogen receptor alpha; cancer; osteoporosis; bone; Alzheimer's;  
KW cardiovascular; ss.  
XX Homo sapiens.  
OS WO200100823-A1.  
XX PD 04-JAN-2001.  
XX PF 27-JUN-2000; 2000WO-EP005981.  
XX PR 29-JUN-1999; 99IT-MI001433.  
XX PA (EUMO-) EURO MOLECULAR BIOLOGY LAB.  
XX PI Gannon F, Denger S, Flouriot G;  
XX WPI; 2001-137955/14.  
XX DR Novel isoforms of human estrogen receptor alpha useful for preparing  
XX therapeutic agents for treating cancer, osteoporosis, Alzheimer's disease  
XX and cardiovascular diseases.  
PS Disclosure; Page 15; 53pp; English.  
XX The present invention relates to a human estrogen receptor (hER)-alpha  
CC isoform. Molecules which modulate the activity of the estrogen receptor  
CC are useful for the preparation of therapeutic agents for treating cancer,  
CC osteoporosis and other bone disorders, Alzheimer's disease and  
CC cardiovascular diseases  
XX Sequence 20 BP; 1 A; 8 C; 3 G; 8 T; 0 U; 0 Other;  
SQ  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 1666 TCACCGCCGCTGGACTTCT 1685  
Db 1 TCCTCGGCCCTTGACTTCT 20  
RESULT 4988  
AAF99650/c  
ID AAF99650 standard; DNA; 20 BP.  
XX AAF99650;  
AC  
XX 12-JUN-2001 (first entry)  
DT  
XX Immunostimulatory nucleic acid #766.  
DE  
XX Vaccine; cytostatic; virucidal; bactericidal; fungicidal; anti-parasitic;  
KW immunostimulatory; tumour; viral infection; bacterial infection;  
KW fungal infection; parasitic infection; cancer; asthma;  
KW infectious disease; allergy; immune deficiency; phosphorothioate; ss.  
XX Synthetic.  
OS  
XX WO200122972-A2.  
PN  
XX 05-APR-2001.  
PD  
XX 25-SEP-2000; 2000WO-US026383.  
PF  
XX 25-SEP-1999; 99US-0156113P.  
PR  
XX 27-SEP-1999; 99US-0156135P.  
PR  
XX 23-AUG-2000; 2000US-0227436P.  
XX  
PA (IOWA ) UNIV IOWA RES FOUND.  
PA (COLE-) COLEY PHARM GMBH.  
XX

PI Krieg AM, Schetter C, Vollmer J;  
XX WPI; 2001-273485/28.  
DR  
XX Vaccinating against tumors, infectious diseases, allergies and asthma  
PT using immunostimulatory Py-rich and TG nucleic acids.  
XX  
PS Claim 101; Page 55; 338pp; English.  
XX  
CC The present invention relates to a method for stimulating an immune  
CC response. The method comprises administering an immunostimulatory nucleic  
CC acid to a non-rodent subject in sufficient quantity to stimulate an  
CC immune response. The present sequence is one such immunostimulatory  
CC nucleic acid. The immunostimulatory nucleic acids can be pyrimidine rich  
CC (py-rich) or thymidine (T) rich. The method is used to vaccinate subjects  
CC against tumour antigens, viral antigens (e.g. herpesviridae, retroviridae  
CC and/or orthomyxoviridae), bacterial antigens (e.g. toxoplasma,  
CC haemophilus, campylobacter, clostridium, Escherichia coli and/or  
CC staphylococcus), fungal antigens and/or parasitic antigens. The method is  
CC also useful for preventing cancer, asthma, infectious disease, allergy or  
CC immune deficiency. The present sequence can also be used to redirect a  
CC Th2 to a Th1 immune response and to activate immune cells. Note: the  
CC present sequence may have a phosphorothioate backbone  
XX Sequence 20 BP; 12 A; 3 C; 2 G; 3 T; 0 U; 0 Other;  
SQ  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 1776 TTTTGTGAACCCCATCTTT 1795  
Db 20 TTTTGTGAACGTCATGTTT 1  
RESULT 4989  
AAF99396/c  
ID AAF99396 standard; DNA; 20 BP.  
XX  
AC AAF99396;  
XX  
DT 12-JUN-2001 (first entry)  
XX  
DE Immunostimulatory nucleic acid #512.  
XX  
KW Vaccine; cytostatic; virucidal; bactericidal; fungicidal; anti-parasitic;  
KW immunostimulatory; tumour; viral infection; bacterial infection;  
KW fungal infection; parasitic infection; cancer; asthma;  
KW infectious disease; allergy; immune deficiency; phosphorothioate; ss.  
XX Synthetic.  
OS  
XX WO200122972-A2.  
PN  
XX 05-APR-2001.  
PD  
XX 25-SEP-2000; 2000WO-US026383.  
PF  
XX 25-SEP-1999; 99US-0156113P.  
PR  
XX 27-SEP-1999; 99US-0156135P.  
PR  
XX 23-AUG-2000; 2000US-0227436P.  
XX  
PA (IOWA ) UNIV IOWA RES FOUND.  
PA (COLE-) COLEY PHARM GMBH.  
XX  
PI Krieg AM, Schetter C, Vollmer J;  
XX WPI; 2001-273485/28.  
DR  
XX Vaccinating against tumors, infectious diseases, allergies and asthma  
PT using immunostimulatory Py-rich and TG nucleic acids.  
XX  
PS Claim 101; Page 48; 338pp; English.  
XX



XX The present invention relates to a method for stimulating an immune  
CC response. The method comprises administering an immunostimulatory nucleic  
CC acid to a non-rodent subject in sufficient quantity to stimulate an  
CC immune response. The present sequence is one such immunostimulatory  
CC nucleic acid. The immunostimulatory nucleic acids can be pyrimidine rich  
CC (py-rich) or thymidine (T) rich. The method is used to vaccinate subjects  
CC against tumour antigens, viral antigens (e.g. herpesviridae, retroviridae  
CC and/or orthomyxoviridae), bacterial antigens (e.g. toxoplasma,  
CC haemophilus, campylobacter, clostridium, Escherichia coli and/or  
CC staphylococcus), fungal antigens and/or parasitic antigens. The method is  
CC also useful for preventing cancer, asthma, infectious disease, allergy or  
CC immune deficiency. The present sequence can also be used to redirect a  
CC Th2 to a Th1 immune response and to activate immune cells. Note: the  
CC present sequence may have a phosphorothioate backbone  
XX  
SQ Sequence 20 BP; 12 A; 3 C; 2 G; 3 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1776 TTTTGTGAACCCCATCTTT 1795  
|||||  
Db 20 TTTTGTGAACGTCATGTTT 1

RESULT 4990  
AAF99576  
ID AAF99576 standard; DNA; 20 BP.

XX AAF99576;

AC AAF99576;  
DT 12-JUN-2001 (first entry)  
XX Immunostimulatory nucleic acid #692.

DE Vaccine; cytostatic; virucidal; bactericidal; fungicidal; anti-parasitic;  
XX immunostimulatory; tumour; viral infection; bacterial infection;  
KW fungal infection; parasitic infection; cancer; asthma;  
KW infectious disease; allergy; immune deficiency; phosphorothioate; ss.

XX Synthetic.

XX WO200122972-A2.

XX 05-APR-2001.

XX 25-SEP-2000; 2000WO-US026383.

XX 25-SEP-1999; 99US-0156113P.

PR 27-SEP-1999; 99US-0156135P.

PR 23-AUG-2000; 2000US-0227436P.

XX (IOWA ) UNIV IOWA RES FOUND.

PA (COLE-) COLEY PHARM GMBH.

XX Krieg AM, Schetter C, Vollmer J;

XX WPI; 2001-273485/28.

XX Vaccinating against tumors, infectious diseases, allergies and asthma  
PT using immunostimulatory Py-rich and TG nucleic acids.

XX Claim 101; Page 53; 338pp; English.

XX The present invention relates to a method for stimulating an immune  
CC response. The method comprises administering an immunostimulatory nucleic  
CC acid to a non-rodent subject in sufficient quantity to stimulate an  
CC immune response. The present sequence is one such immunostimulatory  
CC nucleic acid. The immunostimulatory nucleic acids can be pyrimidine rich  
CC (py-rich) or thymidine (T) rich. The method is used to vaccinate subjects  
CC against tumour antigens, viral antigens (e.g. herpesviridae, retroviridae

CC and/or orthomyxoviridae), bacterial antigens (e.g. toxoplasma,  
CC haemophilus, campylobacter, clostridium, Escherichia coli and/or  
CC staphylococcus), fungal antigens and/or parasitic antigens. The method is  
CC also useful for preventing cancer, asthma, infectious disease, allergy or  
CC immune deficiency. The present sequence can also be used to redirect a  
CC Th2 to a Th1 immune response and to activate immune cells. Note: the  
CC present sequence may have a phosphorothioate backbone  
XX  
SQ Sequence 20 BP; 13 A; 2 C; 2 G; 3 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1966 AATATTACCTTGAAAAAA 1985  
|||||  
Db 1 AATATCAACGTTGAAAAAA 20

RESULT 4991  
AAF99225/C

ID AAF99225 standard; DNA; 20 BP.

XX AAF99225;

AC AAF99225;  
DT 12-JUN-2001 (first entry)

XX Immunostimulatory nucleic acid #341.

DE Vaccine; cytostatic; virucidal; bactericidal; fungicidal; anti-parasitic;  
XX immunostimulatory; tumour; viral infection; bacterial infection;  
KW fungal infection; parasitic infection; cancer; asthma;  
KW infectious disease; allergy; immune deficiency; phosphorothioate; ss.

XX Synthetic.

XX WO200122972-A2.

XX 05-APR-2001.

XX 25-SEP-2000; 2000WO-US026383.

XX 25-SEP-1999; 99US-0156113P.

PR 27-SEP-1999; 99US-0156135P.

PR 23-AUG-2000; 2000US-0227436P.

XX (IOWA ) UNIV IOWA RES FOUND.

PA (COLE-) COLEY PHARM GMBH.

XX Krieg AM, Schetter C, Vollmer J;

XX WPI; 2001-273485/28.

XX Vaccinating against tumors, infectious diseases, allergies and asthma  
PT using immunostimulatory Py-rich and TG nucleic acids.

XX Claim 101; Page 45; 338pp; English.

XX The present invention relates to a method for stimulating an immune  
CC response. The method comprises administering an immunostimulatory nucleic  
CC acid to a non-rodent subject in sufficient quantity to stimulate an  
CC immune response. The present sequence is one such immunostimulatory  
CC nucleic acid. The immunostimulatory nucleic acids can be pyrimidine rich  
CC (py-rich) or thymidine (T) rich. The method is used to vaccinate subjects  
CC against tumour antigens, viral antigens (e.g. herpesviridae, retroviridae  
CC and/or orthomyxoviridae), bacterial antigens (e.g. toxoplasma,  
CC haemophilus, campylobacter, clostridium, Escherichia coli and/or  
CC staphylococcus), fungal antigens and/or parasitic antigens. The method is  
CC also useful for preventing cancer, asthma, infectious disease, allergy or  
CC immune deficiency. The present sequence can also be used to redirect a  
CC Th2 to a Th1 immune response and to activate immune cells. Note: the  
CC present sequence may have a phosphorothioate backbone  
XX

SQ Sequence 20 BP; 2 A; 8 C; 2 G; 8 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 1543 AGAGTAGGGAAGGAACAGGA 1562  
||||| ||||||| |||  
Db 20 AGACTGAGGAAGGAAGTGGGA 1  
RESULT 4992  
AAH41798/c  
ID AAH41798 standard; DNA; 20 BP.  
XX  
AC AAH41798;  
XX  
DT 29-AUG-2001 (first entry)  
XX  
DE RIP 140 gene PCR primer SEQ ID NO:45.  
XX  
KW Base; string; tape; circular disc; ligand; immobilised; PCR primer;  
XX detection; diagnosis; ss.  
OS Synthetic.  
XX  
PN WO200135098-A1.  
XX  
PD 17-MAY-2001.  
XX  
PF 24-OCT-2000; 2000WO-JP007415.  
XX  
PR 05-NOV-1999; 99JP-00315610.  
XX  
PA (TAKI ) TAKARA SHUZO CO LTD.  
XX  
PI Kato I, Izu H, Asada K;  
XX  
DR WPI; 2001-343623/36.  
XX  
PT String, tape or disk shaped bases with several different immobilized  
PT ligands including nucleic acids, sugars, peptides and proteins.  
XX  
PS Example 1; Page 47; 56pp; Japanese.  
XX  
CC The present invention describes bases in the shape of a string, tape or  
CC circular disc on the surface of which a plural number of different  
CC ligands are immobilised respectively in pre-determined domains. Also  
CC described are devices for detecting the binding between the ligands and  
CC receptors and methods for detection using these bases. The methods are  
CC useful for detection in biochemical and diagnostic assays. The ligands  
CC are immobilised in line, so the user only needs to determine the presence  
CC or absence of receptor binding, without further processing. AAH41754 to  
CC AAH41815 represent primers which are used in an example from the present  
CC invention  
XX  
SQ Sequence 20 BP; 2 A; 6 C; 3 G; 9 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 895 ACTGGCTGAAGTACAGAGGC 914  
||||| ||||||| |||  
Db 20 AATGACTGAAGCAAGAGGC 1  
RESULT 4993  
AAS43108/c  
ID AAS43108 standard; DNA; 20 BP.  
XX  
AC AAS43108;  
XX  
DT 16-FEB-2001 (first entry)

DT 18-DEC-2001 (first entry)  
XX  
DE Human ERbeta gene, ER1, 5' splice donor, exon 1E.  
XX  
KW Human; Oestrogen receptor beta; ERbeta; ds; SNP; chromosome 6q.25.1;  
KW single nucleotide polymorphism; cardiovascular disease; 5' splice donor;  
KW autoimmune disease; systemic lupus erythematosus; arthritis; rheumatism;  
KW osteoarthritis; osteoporosis; breast cancer; endometrial cancer.  
XX  
OS Homo sapiens.  
XX  
PN WO200162793-A2.  
XX  
PD 30-AUG-2001.  
XX  
PF 20-FEB-2001; 2001WO-US005360.  
XX  
PR 22-FEB-2000; 2000US-0183755P.  
PR 24-JAN-2001; 2001US-00768185.  
XX  
PA (PEKE ) PE CORP NY.  
XX  
PI Kalush F, Cassel MJ, Hwang SS, Winn-Deen ES;  
XX  
DR WPI; 2001-582041/65.  
XX  
PT Estrogen receptor gene and protein polymorphisms useful for diagnosis of  
PT individuals at risk of developing bone disorders.  
XX  
PS Example 2; Page 55; 245pp; English.  
XX  
CC The invention relates to a novel isolated peptide comprising or  
CC consisting of an amino acid sequence selected from an amino acid sequence  
CC of a variant oestrogen receptor protein (e.g. ERbeta), or a fragment of  
CC 10 amino acids), antibodies against them, nucleic acids encoding them  
CC (including vectors for transforming cells). The gene for human ERbeta is  
CC located on chromosome 6q.25.1. The variants are encoded by single  
CC nucleotide polymorphisms (SNP). The variant peptides and proteins can be  
CC used in assays to determine the biological activity of the protein, to  
CC raise antibodies, as a reagent in assays designed to quantitatively  
CC determine levels of the protein in biological fluids, to identify  
CC compounds that modulate receptor activity and to screen compounds for the  
CC ability to stimulate or inhibit interaction between the receptor protein  
CC and a target molecule that normally interacts with the receptor protein  
CC e.g. oestrogen. The antibody can be used to isolate the protein, to  
CC assess expression in disease states e.g. cardiovascular disease and  
CC autoimmune disease (e.g. systemic lupus erythematosus, arthritis,  
CC rheumatism and osteoarthritis), osteoporosis, breast cancer and  
CC endometrial cancer. In addition the antibodies can be used in  
CC pharmacogenomic analysis and inhibiting protein function, e.g. blocking  
CC the binding of the oestrogen receptor protein to a binding partner such  
CC as a ligand. The nucleic acids encoding the proteins can be used as  
CC probes, primers, chemical intermediates and in biological assays. The  
CC present sequence is a 5' splice donor site from the human ERbeta gene  
XX  
SQ Sequence 20 BP; 15 A; 1 C; 4 G; 0 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 2155 TTTTCTCTCCTTTTCTTTT 2174  
||||| ||||||| |||  
Db 20 TTTCTTCTCTCCTTTTCTTTT 1  
RESULT 4994  
AAC67698  
ID AAC67698 standard; DNA; 20 BP.  
XX  
AC AAC67698;  
XX  
DT 16-FEB-2001 (first entry)









```
CC identifying, or characterizing at least 1 component of a sample,
CC especially nucleic acids and/or proteins, and for screening for and/or
CC identifying cellular or synthetic binding partners, preferably proteins,
CC peptides, nucleic acids, chemical agents, preferably organic compounds,
CC pharmaceuticals, plant protection agents, toxins, venoms, carcinogens,
CC teratogens, herbicides, fungicides or pesticides
XX
SQ Sequence 20 BP; 1 A; 0 C; 4 G; 15 T; 0 U; 0 Other;

Query Match          0.5%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 4.5e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 2779 AGAATTGAAAAA 2798
Db 20 ACACCTCAAAAAA 1

RESULT 5001
AAF91308/c
ID AAF91308 standard; DNA; 20 BP.
XX
AC AAF91308;
XX
DT 04-MAY-2001 (first entry)
XX
DE Human E2F transcription factor 1 antisense oligonucleotide #14.
XX
KW Antisense; E2F transcription factor 1; human; infection; inflammation;
KW tumour; ss.
XX
OS Homo sapiens.
XX
PN US6187587-B1.
XX
PD 13-FEB-2001.
XX
PF 02-MAR-2000; 2000US-00517584.
XX
PR 02-MAR-2000; 2000US-00517584.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Popoff I, Brown-Driver VL, Cowser LM;
XX
DR WPI; 2001-190981/19.
XX
PT Antisense compound capable of inhibiting the expression of E2F
PT transcription factor 1, useful for preventing or delaying infection,
PT inflammation or tumor formation.
XX
PS Claim 1; Col 42; 40pp; English.
XX
CC The present invention relates to antisense compounds up to 30 nucleobases
CC in length targeted to a E2F transcription factor 1. The invention is
CC useful for inhibiting the expression of E2F transcription factor 1 in
CC cells or tissues. The antisense oligonucleotides may also be used as a
CC research agent and to prevent infection, inflammation or tumours
XX
SQ Sequence 20 BP; 2 A; 9 C; 6 G; 3 T; 0 U; 0 Other;

Query Match          0.5%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 4.5e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 646 CCTGCCGAGAACCTGGGC 665
Db 20 CCTGCCGAGACGAGTGGGC 1

RESULT 5002
AAD09641
ID AAD09641 standard; DNA; 20 BP.
```

```
XX
AC AAD09641;
XX
DT 10-SEP-2001 (first entry)
XX
DE Human PKA C-alpha chimeric antisense oligonucleotide (ISIS# 102614).
XX
KW Human; protein kinase A; PKA catalytic subunit C-alpha inhibitor;
KW therapy; infection; inflammation; tumour; prophylaxis; antisense;
KW phosphorothioate backbone; chimeric; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX Chimeric.
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /*note= "Phosphorothioate backbone"
FT modified_base 1..5
FT /*tag= b
FT /mod_base= OTHER
FT /*note= "Methoxyethyl residues"
FT modified_base 1..3
FT /*tag= c
FT /mod_base= m5c
FT misc_feature 6..15
FT /*tag= d
FT /*note= "Central gap region"
FT modified_base 16..20
FT /*tag= e
FT /mod_base= OTHER
FT /*note= "Methoxyethyl residues"
FT modified_base 17
FT /*tag= f
FT /mod_base= m5c
XX
PN US6248586-B1.
XX
PD 19-JUN-2001.
XX
PF 17-DEC-1999; 99US-00467082.
XX
PR 17-DEC-1999; 99US-00467082.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Monia BP, Cowser LM;
XX
DR WPI; 2001-407321/43.
XX
PT Antisense oligonucleotides for inhibiting the expression of the human
PT protein kinase A catalytic subunit C-alpha, particularly useful for
PT preventing, delaying or treating infection, inflammation or tumor
PT formation.
XX
PS Claim 1; Col 44; 35pp; English.
XX
CC The invention is directed to antisense compounds, particularly
CC oligonucleotides which are targeted to a DNA encoding human protein
CC kinase A (PKA) catalytic subunit C-alpha to modulate (inhibit) its
CC expression. The antisense compounds are useful for diagnostics,
CC therapeutics, prophylaxis and as research reagents or kits. The antisense
CC oligonucleotides are useful for treating human, suspected of having or
CC being prone to a disease or condition associated with the expression of
CC PKA catalytic subunit C-alpha. In particular, the antisense
CC oligonucleotides are useful for preventing, delaying or treating
CC infection, inflammation and tumour formation. They are also useful in
CC antisense therapy. The present sequence is a chimeric antisense
CC oligonucleotide with a phosphorothioate backbone. This oligo is targeted
CC to the start codon of human PKA catalytic subunit C-alpha to inhibit its
CC expression
```

[illegible]

DE Human PD-ABC form 2 DNA exon 9 3' splice site.  
XX  
KW PD-ATP-binding cassette; PD-ABC; chromosome 19p13.3; spleen; thymus; ds;  
KW peripheral blood leukocyte; bone marrow; lymph node; dyslipidaemia;  
KW cardiovascular disorder; inflammatory disorder; abnormal calcium flux;  
KW epilepsy; coronary artery disease; Tangier's disease; atherosclerosis;  
KW familial high-density lipoprotein deficiency; fatty liver disease;  
KW atherosclerosis; diabetes; insulin resistance; obesity; drug screening;  
KW alcoholism; retinal degeneration; hypertension; vascular disease.  
XX  
OS Homo sapiens.  
XX  
PN WO200153490-A1.  
XX  
PD 26-JUL-2001.  
XX  
PF 23-JAN-2001; 2001WO-US002191.  
XX  
PR 24-JAN-2000; 2000US-0177889P.  
PR 30-JUN-2000; 2000US-0215405P.  
XX  
PA (WARN ) WARNER LAMBERT CO.  
XX  
PI Johns MA, Tafuri SR, Wang M;  
XX  
DR WPI; 2001-442259/47.  
XX  
PT New Human PD-ABC DNA molecules and proteins for diagnosis and treatment  
PT of dyslipidemia, epilepsy and diseases related to abnormal calcium flux.  
XX  
PS Disclosure; Page 39; 77pp; English.  
XX  
CC The sequence represents a splice site within a DNA molecule encoding  
CC human PD-ATP-binding cassette (PD-ABC) protein. PD-ABC maps to chromosome  
CC 19p13.3 and is expressed in various tissues including spleen, thymus,  
CC peripheral blood leukocytes, bone marrow and lymph nodes. The PD-ABC DNA  
CC molecules and proteins are used to diagnose and treat cardiovascular  
CC disorders, inflammatory disorders, dyslipidaemia, epilepsy, diseases  
CC related to abnormal calcium flux, coronary artery disease, Tangier's  
CC disease, familial high-density lipoprotein deficiency, atherosclerosis,  
CC diabetes, fatty liver disease, insulin resistance, obesity, alcoholism,  
CC retinal degeneration, hypertension and vascular disease. The sequences  
CC are also used in drug screening assays  
XX  
SQ Sequence 20 BP; 4 A; 10 C; 4 G; 2 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
Qy 607 CCTGCTGCTGCCCCACGCAC 626  
Db 1 CATGCTGCAGCCCCGCACAC 20  
  
RESULT 5006  
AAI98550  
ID AAI98550 standard; DNA; 20 BP.  
XX  
AC AAI98550;  
XX  
DT 30-NOV-2001 (first entry)  
XX  
DE Genomic DNA methylation state detecting oligonucleotide SEQ ID 389.  
XX  
KW Peptide nucleic acid; PNA; detection; methylation; cytosine;  
KW gene expression regulation; ss.  
XX  
OS Unidentified.  
XX  
PN WO200168910-A2.  
XX  
PD 20-SEP-2001.

XX  
PF 15-MAR-2001; 2001WO-DE001089.  
XX  
PR 15-MAR-2000; 2000DE-01013847.  
XX  
PA (EPIG-) EPIGENOMICS AG.  
XX  
PI Berlin K;  
XX  
DR WPI; 2001-596913/67.  
XX  
PT Parallel detection of methylation in genomic DNA where DNA is chemically  
PT modified, fragmented, amplified and hybridized to probes, useful to  
PT investigate gene expression regulation.  
XX  
PS Example 2; Page 98; 116pp; German.  
XX  
CC This sequence represents a novel method for the parallel detection of  
CC cytosine methylation in genomic DNA comprising: (a) chemically treating a  
CC DNA sample so that 5' unmethylated cytosine is converted to  
CC uracil/thymidine; (b) amplifying the sample up to 10 different fragments,  
CC each less than 2000 base pairs (bp) using synthetic primers; (c)  
CC hybridizing the amplified sequence to an oligonucleotide or PNA-oligomer  
CC containing at least two sequences fully defined in the specification and  
CC (d) detecting hybridization. The invention is used in the investigation  
CC of regulation of gene expression by methylation. AAI98162-AAI98557  
CC represents oligonucleotide sequences used to illustrate the method of the  
CC invention  
XX  
SQ Sequence 20 BP; 5 A; 0 C; 6 G; 9 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
Qy 2695 ATTTGGATTGAACCTCTCTG 2714  
Db 1 ATTTGGAGTTGAAGTATTG 20  
  
RESULT 5007  
AAF75050/C  
ID AAF75050 standard; DNA; 20 BP.  
XX  
AC AAF75050;  
XX  
DT 08-MAY-2001 (first entry)  
XX  
DE Primer #22.  
XX  
KW 5-hydroxy tryptamine receptor 1A; HTR1A; polymorphism; Tourette's;  
KW neuropsychiatric; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO200110884-A1.  
XX  
PD 15-FEB-2001.  
XX  
PF 01-AUG-2000; 2000WO-US040519.  
XX  
PR 06-AUG-1999; 99US-0147711P.  
XX  
PA (GENA-) GENAISSANCE PHARM INC.  
XX  
PI Denton RR, Kliem SE, Nandabalan K, Stephens JC;  
XX  
DR WPI; 2001-191514/19.  
XX  
PT New 5-hydroxy tryptamine receptor 1A gene variants for studying  
PT expression and biological function of the gene and for developing drugs  
PT targeting 5-hydroxy tryptamine receptor 1A protein.  
XX



PS Example 1; Page 34; 64pp; English.

XX The present invention relates to 5-hydroxy tryptamine receptor 1A (HTR1A)

CC gene. HTR1A-encoding polynucleotides containing one or more of the novel

CC polymorphic sites are useful in studying the expression and biological

CC function of HTR1A, as well as in developing drugs targeting this protein.

CC In addition, information on the combinations of polymorphisms in the

CC HTR1A gene may have diagnostic and forensic applications. A polymorphic

CC variant of HTR1A is useful in studying the effect of the variation on the

CC biological activity of HTR1A as well as studying the binding affinity of

CC candidate drugs targeting HTR1A for the treatment of neuropsychiatric

CC diseases and Tourette's syndrome

XX

SQ Sequence 20 BP; 5 A; 5 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 4.5e+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 803 CTGTGGGGCGCGTAATGAA 822

Db 20 CTGTGGGGCGCGTAATCAA 1

RESULT 5008

AAS12922

ID AAS12922 standard; DNA; 20 BP.

XX AAS12922;

AC

XX 04-DEC-2001 (first entry)

DT

XX Human BCMP 11 cDNA sense RT-PCR primer.

DE

XX BCMP 11; antiproliferative; cytostatic; breast cancer; mammal; human; ss;

XX monkey; ape; cat; dog; cow; horse; rabbit; vaccine; PCR primer.

KW

XX Homo sapiens.

OS

XX WO200163289-A1.

PN

XX 30-AUG-2001.

PD

XX 21-FEB-2001; 2001WO-GB000730.

XX

PF 25-FEB-2000; 2000GB-00004576.

XX

PR (OXFO-) OXFORD GLYCOSCIENCES UK LTD.

XX

PA Boyd RS, Stamps AC, Terrett JA, Tyson KL;

XX

PI WPI; 2001-514828/56.

XX

DR

XX Diagnosis of breast cancer for the screening and detection of BCMP 11

PT comprises detection and quantification of BCMP 11 polypeptide and nucleic

PT acid.

XX

PS Example 2; Page 49; 66pp; English.

XX The invention relates to a method of screening for and diagnosing breast

CC cancer in a mammalian subject. This comprises detecting or quantifying a

CC polypeptide, BCMP 11, or its associated DNA sequence in the subject,

CC which may be a monkey, ape, cat, dog, cow, horse or rabbit, but

CC preferably a human. BCMP 11 polypeptides and polynucleotides are useful

CC for the treatment or prophylaxis of breast cancer. Antibodies which bind

CC to BCMP 11 peptides are useful for the preparation of vaccines and are

CC discovered through screening or monitoring for compounds that modulate

CC BCMP 11 expression. Metastatic breast cancer cells can be identified by

CC determining the presence or absence of BCMP 11 DNA or by studying the

CC expression level of the protein. This sequence represents a PCR primer

CC used to analyse the distribution of BCMP 11 mRNA in normal human tissues

CC and in breast cancer cell lines by RT-PCR

XX

SQ Sequence 20 BP; 5 A; 4 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 4.5e+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 849 CTGGAAGATTGTCGTCCTC 868

Db 1 CTGGAGGATTGTCAATATC 20

RESULT 5009

AAH62087

ID AAH62087 standard; DNA; 20 BP.

XX

AC AAH62087;

XX

DT 10-SEP-2001 (first entry)

XX

DE PDGF B hairpin/hammerhead ribozyme recognition site SEQ ID NO:4511.

XX

XX Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;

KW recognition site; target; ribozyme binding site; eye disease; vulnery;

KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;

KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;

KW matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;

KW antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;

KW antiskinning; ophthalmological; keratolytic; gene therapy; viral wart;

KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;

KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;

KW sickle cell retinopathy; ss.

XX

OS Homo sapiens.

OS Synthetic.

XX WO200130362-A2.

PN

XX 03-MAY-2001.

PD

XX 26-OCT-2000; 2000WO-US029500.

PF

XX 26-OCT-1999; 99US-0161532P.

PR

XX (IMMU-) IMMUSOL INC.

XX

PA Robbins JM, Tritz R;

PI

XX WPI; 2001-300427/31.

DR

XX Treating proliferative skin or eye diseases and scarring, using ribozymes

PT that cleave RNA encoding cytokines involved in inflammation, matrix

PT metalloproteinases, growth factors and cell-cycle dependent kinases.

XX

PS Example 1; Page 25; 408pp; English.

XX The present invention describes a method for treating a proliferative

CC skin or eye disease and scarring. The method involves administering a

CC ribozyme (I) which cleaves RNA encoding a cytokine involved in

CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle

CC dependent kinase, growth factor or a reductase, or administering a

CC nucleic acid molecule (II) comprising a promoter operably linked to a

CC nucleic acid segment encoding (I). (I) can have antipsoriatic,

CC dermatological, cytostatic, antiseborrheic, antidiabetic, antiskinning,

CC ophthalmological, vulnery, keratolytic and virucide activities, and

CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used

CC in gene therapy. (I) and (II) are useful for treating proliferative skin

CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,

CC squamous or basal cell carcinoma and viral or seborrheic wart. They can

CC also be used for treating proliferative eye diseases such as diabetic

CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of

CC prematurity and retinal detachment, and for treating and preventing

CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn

CC scar. AAH57577 to AAH62099 represent sequences used in the

XX

CC exemplification of the present invention  
XX  
SQ Sequence 20 BP; 3 A; 8 C; 5 G; 4 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 360 AGCAGCTGGCCTACTCCAC 379  
Db 1 ATCAGCGGTCTCTCTCCAC 20  
  
RESULT 5010  
AAS43046  
ID AAS43046 standard; DNA; 20 BP.  
XX  
AC AAS43046;  
XX  
DT 17-DEC-2001 (first entry)  
XX  
DE Breast cancer-associated membrane protein (BCMP) 11 cDNA PCR primer #3.  
XX  
KW Breast cancer-associated membrane protein; BCMP; cytosstatic; ss;  
KW gene therapy; PCR primer.  
XX  
OS Homo sapiens.  
XX  
PN WO200162784-A2.  
XX  
PD 30-AUG-2001.  
XX  
PF 21-FEB-2001; 2001WO-GB0000748.  
XX  
PR 25-FEB-2000; 2000GB-00004576.  
PR 21-DEC-2000; 2000GB-00031341.  
XX  
PA (OXFO-) OXFORD GLYCOSCIENCES UK LTD.  
XX  
PI Boyd RS, Stamps AC, Terrett JA;  
XX  
DR WPI; 2001-557697/62.  
XX  
PT Screening, diagnosis, prognosis, prevention and treatment of breast  
PT cancer in a subject, by using breast cancer-associated membrane proteins  
PT identified in membrane protein extracts of cultured human mammary cell  
PT lines.  
XX  
PS Example 3; Page 107; 136pp; English.  
XX  
CC Sequences AAS43037-AAS43059 represent DNA encoding breast cancer-  
CC associated membrane proteins (BCMPs) and PCR primers specific to the DNA.  
CC The BCMPs and their associated polynucleotides are used for treating or  
CC preventing breast cancer and also in prophylaxis and screening for breast  
CC cancer. The presence of or a predisposition to the disease can be  
CC detected by screening for BCMP expression and/or activity since the  
CC peptides may induce an immune response. The peptides are also useful for  
CC monitoring the effectiveness of breast cancer therapy  
XX  
SQ Sequence 20 BP; 5 A; 4 C; 5 G; 6 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 849 CTGAAGATTGCTCCTC 868  
Db 1 CTGAGGATTGTCATATC 20  
  
RESULT 5011  
AAS29454/c  
ID AAS29454 standard; DNA; 20 BP.

XX AAS29454;  
AC  
XX 21-NOV-2001 (first entry)  
DT  
DE Human mdm2 antisense oligonucleotide 31606.  
XX  
KW Human; mdm2; hyperproliferative disorder; cancer; psoriasis;  
KW atherosclerosis; tumour; cytosstatic; anti psoriatic;  
KW anti arteriosclerotic; vasotropic; antisense; phosphorothioate; ss.  
XX  
OS Homo sapiens.  
XX  
FH Key Location/Qualifiers  
FT modified\_base 1..20  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "OTHER= All phosphorothioate linkages,  
FT additionally bases 1-6 and bases 15-20 are 2'-O-  
FT methoxyethyl bases, and bases 7-14 are deoxynucleotides"  
XX  
PN US2001016575-A1.  
XX  
PD 23-AUG-2001.  
XX  
PF 02-JAN-2001; 2001US-00752983.  
XX  
PR 26-MAR-1998; 98US-00048810.  
PR 26-MAR-1999; 99US-00280805.  
XX  
PA (MIRA/) MIRAGLIA L J.  
PA (NERO/) NERO P.  
PA (GRAH/) GRAHAM M J.  
PA (MONI/) MONIA B P.  
PA (COWS/) COWSERT L M.  
XX  
PI Miraglia LJ, Nero P, Graham MJ, Monia BP, Cowsert LM;  
XX WPI; 2001-535565/59.  
XX  
PT An antisense compound, useful for treating e.g. cancer, comprises  
PT nucleobases targeted a region (e.g. translation termination codon region)  
PT of a nucleic acid encoding human mdm2.  
XX  
PS Example 9; Page 17; 81pp; English.  
XX  
CC The present invention relates to antisense compounds, 8-30 nucleobases in  
CC length targeted to the 5' untranslated region, translation termination  
CC codon region, 3' untranslated region, coding region or translation start  
CC site of a nucleic acid encoding human mdm2, where the antisense compound  
CC modulates the expression of human mdm2. The antisense oligonucleotides of  
CC the invention are useful for encoding human mdm2 and for inhibiting the  
CC expression of human mdm2. They may be used for treating an animal having  
CC a disease or condition associated with amplification of mdm2 gene or  
CC overexpression of mdm2 e.g. a hyperproliferative disorder such as cancer  
CC (blood, brain, breast, lung, or a soft tissue cancer) and psoriasis,  
CC fibrosis, atherosclerosis or restenosis, tumours, colorectal carcinoma  
CC and chronic myelogenous leukemia. The antisense compound may be  
CC administered with a chemotherapeutic agent to overcome drug resistance.  
CC The antisense compound reduces hyperproliferation of human cells. The  
CC method, which involves the use of the antisense compound, is also useful  
CC for detecting the role of mdm2 expression in various cell functions and  
CC physiological processes and useful in both clinical research and  
CC diagnostic tools. AAS29242-AAS29507 represent the human mdm2 antisense  
CC oligonucleotides of the present invention  
XX  
SQ Sequence 20 BP; 8 A; 1 C; 3 G; 8 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 2520 TTTATTCATATATACAGG 2539

Db 20 TTTATTCACATATATCAAG 1  
|||||  
RESULT 5012  
AAH80587  
ID AAH80587 standard; cDNA; 20 BP.  
XX AC AAH80587;  
XX DT 11-SEP-2003 (revised)  
DT 19-SEP-2001 (first entry)  
XX DE Oligonucleotide hybridisation potential related cDNA SEQ ID NO: 551.  
XX KW Nucleic acid hybridisation; probe; primer; human; rabbit; HIV-1;  
KW disease diagnosis; ss.  
XX OS Human immunodeficiency virus 1.  
XX PN US6251588-B1.  
XX PD 26-JUN-2001.  
XX PF 10-FEB-1998; 98US-00021701.  
XX PR 10-FEB-1998; 98US-00021701.  
XX PA (AGIL-) AGILENT TECHNOLOGIES INC.  
XX PI Shannon KW, Wolber PK, Delenstarr GC, Webb PG, Kincaid RH;  
PI WPI; 2001-424456/45.  
XX DR  
XX PT Predicting the potential of an oligonucleotide to hybridize to a target  
PT nucleotide sequence, useful for evaluating oligonucleotide probe  
PT sequences, by identifying a oligonucleotides based on the evaluation of  
PT parameters.  
XX PS Example 2; Col 65; 342pp; English.  
XX CC The present invention describes a method for predicting the potential of  
CC an oligonucleotide to hybridise to a (complementary) target nucleotide  
CC sequence, involving identifying a subset of oligonucleotides within the  
CC predetermined number of unique oligonucleotides based on the evaluation  
CC of the parameter. Oligonucleotides in the subset are identified that are  
CC clustered along a region of the nucleotide sequence that is hybridisable  
CC to the target nucleotide sequence. This is useful for evaluating  
CC oligonucleotide probe sequences. The present sequence is an  
CC oligonucleotide described in the exemplification of the invention.  
CC (Updated on 11-SEP-2003 to standardise OS field)  
XX SQ Sequence 20 BP; 2 A; 2 C; 1 G; 15 T; 0 U; 0 Other;  
PS Example 2; Col 65; 342pp; English.  
XX CC The present invention describes a method for predicting the potential of  
CC an oligonucleotide to hybridise to a (complementary) target nucleotide  
CC sequence, involving identifying a subset of oligonucleotides within the  
CC predetermined number of unique oligonucleotides based on the evaluation  
CC of the parameter. Oligonucleotides in the subset are identified that are  
CC clustered along a region of the nucleotide sequence that is hybridisable  
CC to the target nucleotide sequence. This is useful for evaluating  
CC oligonucleotide probe sequences. The present sequence is an  
CC oligonucleotide described in the exemplification of the invention.  
CC (Updated on 11-SEP-2003 to standardise OS field)  
XX SQ Sequence 20 BP; 2 A; 2 C; 1 G; 15 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
Qy 2159 TTTCTCCTTTTCTTTTCTTTT 2178  
Db 1 TTAGTGATTTTCTTTTCTTTT 20  
|||||  
RESULT 5013  
AAH80390/c  
ID AAH80390 standard; cDNA; 20 BP.  
XX AC AAH80390;  
XX DT 11-SEP-2003 (revised)  
DT 19-SEP-2001 (first entry)  
XX DE Oligonucleotide hybridisation potential related cDNA SEQ ID NO: 354.

XX KW Nucleic acid hybridisation; probe; primer; human; rabbit; HIV-1;  
KW disease diagnosis; ss.  
XX OS Human immunodeficiency virus 1.  
XX PN US6251588-B1.  
XX PD 26-JUN-2001.  
XX PF 10-FEB-1998; 98US-00021701.  
XX PR 10-FEB-1998; 98US-00021701.  
XX PA (AGIL-) AGILENT TECHNOLOGIES INC.  
XX PI Shannon KW, Wolber PK, Delenstarr GC, Webb PG, Kincaid RH;  
PI WPI; 2001-424456/45.  
XX DR  
XX PT Predicting the potential of an oligonucleotide to hybridize to a target  
PT nucleotide sequence, useful for evaluating oligonucleotide probe  
PT sequences, by identifying a oligonucleotides based on the evaluation of  
PT parameters.  
XX PS Example 2; Col 59; 342pp; English.  
XX CC The present invention describes a method for predicting the potential of  
CC an oligonucleotide to hybridise to a (complementary) target nucleotide  
CC sequence, involving identifying a subset of oligonucleotides within the  
CC predetermined number of unique oligonucleotides based on the evaluation  
CC of the parameter. Oligonucleotides in the subset are identified that are  
CC clustered along a region of the nucleotide sequence that is hybridisable  
CC to the target nucleotide sequence. This is useful for evaluating  
CC oligonucleotide probe sequences. The present sequence is an  
CC oligonucleotide described in the exemplification of the invention.  
CC (Updated on 11-SEP-2003 to standardise OS field)  
XX SQ Sequence 20 BP; 7 A; 2 C; 3 G; 8 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
Qy 1818 AAGTTTGTAGATCTTTTAAA 1837  
Db 20 AAATCTTAGAGCCTTTTAAA 1  
|||||  
RESULT 5014  
AAH80810/c  
ID AAH80810 standard; cDNA; 20 BP.  
XX AC AAH80810;  
XX DT 11-SEP-2003 (revised)  
DT 19-SEP-2001 (first entry)  
XX DE Oligonucleotide hybridisation potential related cDNA SEQ ID NO: 774.  
XX KW Nucleic acid hybridisation; probe; primer; human; rabbit; HIV-1;  
KW disease diagnosis; ss.  
XX OS Human immunodeficiency virus 1.  
XX PN US6251588-B1.  
XX PD 26-JUN-2001.  
XX PF 10-FEB-1998; 98US-00021701.  
XX PR 10-FEB-1998; 98US-00021701.  
XX DE Oligonucleotide hybridisation potential related cDNA SEQ ID NO: 774.

PA (AGIL-) AGILENT TECHNOLOGIES INC.  
XX Shannon KW, Wolber PK, Delenstarr GC, Webb PG, Kincaid RH;  
PI WPI; 2001-424456/45.  
XX  
PT Predicting the potential of an oligonucleotide to hybridize to a target  
PT nucleotide sequence, useful for evaluating oligonucleotide probe  
PT sequences, by identifying a oligonucleotides based on the evaluation of  
PT parameters.  
XX  
PS Example 2; Col 71; 342pp; English.  
XX  
CC The present invention describes a method for predicting the potential of  
CC an oligonucleotide to hybridize to a (complementary) target nucleotide  
CC sequence, involving identifying a subset of oligonucleotides within the  
CC sequence, involving identifying a subset of oligonucleotides based on the  
CC predetermined number of unique oligonucleotides in the evaluation  
CC of the parameter. Oligonucleotides in the subset are identified that are  
CC clustered along a region of the nucleotide sequence that is hybridisable  
CC to the target nucleotide sequences. This is useful for evaluating  
CC oligonucleotide probe sequences. The present sequence is an  
CC oligonucleotide described in the exemplification of the invention.  
CC (Updated on 11-SEP-2003 to standardise OS field)  
XX  
SQ Sequence 20 BP; 2 A; 3 C; 1 G; 14 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 2784 TGAAAAAATAAAAAAAAAA 2803  
Db 20 TGACAGAGAGAAAAATAAAA 1  
  
RESULT 5015  
AAH80812/c  
ID AAH80812 standard; cDNA; 20 BP.  
XX  
AC AAH80812;  
XX  
DT 11-SEP-2003 (revised)  
DT 19-SEP-2001 (first entry)  
XX  
DE Oligonucleotide hybridisation potential related cDNA SEQ ID NO: 776.  
XX  
KW Nucleic acid hybridisation; probe; primer; human; rabbit; HIV-1;  
KW disease diagnosis; ss.  
XX  
OS Human immunodeficiency virus 1.  
XX  
PN US6251588-B1.  
XX  
PD 26-JUN-2001.  
XX  
PF 11-SEP-2003 (revised)  
DT 19-SEP-2001 (first entry)  
XX  
DE Oligonucleotide hybridisation potential related cDNA SEQ ID NO: 776.  
XX  
KW Nucleic acid hybridisation; probe; primer; human; rabbit; HIV-1;  
KW disease diagnosis; ss.  
XX  
OS Human immunodeficiency virus 1.  
XX  
PN US6251588-B1.  
XX  
PD 26-JUN-2001.  
XX  
PF 10-FEB-1998; 98US-00021701.  
XX  
PR 10-FEB-1998; 98US-00021701.  
XX  
PA (AGIL-) AGILENT TECHNOLOGIES INC.  
XX  
PI Shannon KW, Wolber PK, Delenstarr GC, Webb PG, Kincaid RH;  
XX  
DR WPI; 2001-424456/45.  
XX  
PT Predicting the potential of an oligonucleotide to hybridize to a target  
PT nucleotide sequence, useful for evaluating oligonucleotide probe  
PT sequences, by identifying a oligonucleotides based on the evaluation of  
PT parameters.  
XX  
PS Example 2; Col 71; 342pp; English.  
XX  
CC The present invention describes a method for predicting the potential of

CC an oligonucleotide to hybridize to a (complementary) target nucleotide  
CC sequence, involving identifying a subset of oligonucleotides within the  
CC predetermined number of unique oligonucleotides based on the evaluation  
CC of the parameter. Oligonucleotides in the subset are identified that are  
CC clustered along a region of the nucleotide sequence that is hybridisable  
CC to the target nucleotide sequences. This is useful for evaluating  
CC oligonucleotide probe sequences. The present sequence is an  
CC oligonucleotide described in the exemplification of the invention.  
CC (Updated on 11-SEP-2003 to standardise OS field)  
XX  
SQ Sequence 20 BP; 3 A; 3 C; 1 G; 13 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 2782 ATTGAAAAAATAAAAAAAAA 2801  
Db 20 ATTGACAGAGAAAAATAA 1  
  
RESULT 5016  
AAH80811/c  
ID AAH80811 standard; cDNA; 20 BP.  
XX  
AC AAH80811;  
XX  
DT 11-SEP-2003 (revised)  
DT 19-SEP-2001 (first entry)  
XX  
DE Oligonucleotide hybridisation potential related cDNA SEQ ID NO: 775.  
XX  
KW Nucleic acid hybridisation; probe; primer; human; rabbit; HIV-1;  
KW disease diagnosis; ss.  
XX  
OS Human immunodeficiency virus 1.  
XX  
PN US6251588-B1.  
XX  
PD 26-JUN-2001.  
XX  
PF 10-FEB-1998; 98US-00021701.  
XX  
PR 10-FEB-1998; 98US-00021701.  
XX  
PA (AGIL-) AGILENT TECHNOLOGIES INC.  
XX  
PI Shannon KW, Wolber PK, Delenstarr GC, Webb PG, Kincaid RH;  
XX  
DR WPI; 2001-424456/45.  
XX  
PT Predicting the potential of an oligonucleotide to hybridize to a target  
PT nucleotide sequence, useful for evaluating oligonucleotide probe  
PT sequences, by identifying a oligonucleotides based on the evaluation of  
PT parameters.  
XX  
PS Example 2; Col 71; 342pp; English.  
XX  
CC The present invention describes a method for predicting the potential of  
CC an oligonucleotide to hybridize to a (complementary) target nucleotide  
CC sequence, involving identifying a subset of oligonucleotides within the  
CC predetermined number of unique oligonucleotides based on the evaluation  
CC of the parameter. Oligonucleotides in the subset are identified that are  
CC clustered along a region of the nucleotide sequence that is hybridisable  
CC to the target nucleotide sequences. This is useful for evaluating  
CC oligonucleotide probe sequences. The present sequence is an  
CC oligonucleotide described in the exemplification of the invention.  
CC (Updated on 11-SEP-2003 to standardise OS field)  
XX  
SQ Sequence 20 BP; 3 A; 3 C; 1 G; 13 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 2784 TGAAAAAATAAAAAAAAAA 2803  
Db 20 TGACAGAGAGAAAAATAAAA 1  
  
RESULT 5015  
AAH80812/c  
ID AAH80812 standard; cDNA; 20 BP.  
XX  
AC AAH80812;  
XX  
DT 11-SEP-2003 (revised)  
DT 19-SEP-2001 (first entry)  
XX  
DE Oligonucleotide hybridisation potential related cDNA SEQ ID NO: 776.  
XX  
KW Nucleic acid hybridisation; probe; primer; human; rabbit; HIV-1;  
KW disease diagnosis; ss.  
XX  
OS Human immunodeficiency virus 1.  
XX  
PN US6251588-B1.  
XX  
PD 26-JUN-2001.  
XX  
PF 11-SEP-2003 (revised)  
DT 19-SEP-2001 (first entry)  
XX  
DE Oligonucleotide hybridisation potential related cDNA SEQ ID NO: 776.  
XX  
KW Nucleic acid hybridisation; probe; primer; human; rabbit; HIV-1;  
KW disease diagnosis; ss.  
XX  
OS Human immunodeficiency virus 1.  
XX  
PN US6251588-B1.  
XX  
PD 26-JUN-2001.  
XX  
PF 10-FEB-1998; 98US-00021701.  
XX  
PR 10-FEB-1998; 98US-00021701.  
XX  
PA (AGIL-) AGILENT TECHNOLOGIES INC.  
XX  
PI Shannon KW, Wolber PK, Delenstarr GC, Webb PG, Kincaid RH;  
XX  
DR WPI; 2001-424456/45.  
XX  
PT Predicting the potential of an oligonucleotide to hybridize to a target  
PT nucleotide sequence, useful for evaluating oligonucleotide probe  
PT sequences, by identifying a oligonucleotides based on the evaluation of  
PT parameters.  
XX  
PS Example 2; Col 71; 342pp; English.  
XX  
CC The present invention describes a method for predicting the potential of



Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 2783 TTGAAAAA 2802  
Db 20 TTGACAGA 1

RESULT 5017  
ABA81742  
ID ABA81742 standard; DNA; 20 BP.  
XX  
AC ABA81742;  
XX  
DT 25-JAN-2002 (first entry)  
XX  
DE PCR primer KP212.  
XX  
KW Aldehyde-dehydrogenase; enzyme; phenanthrene; anthracene; PCR primer;  
KW aromatic dihydrodiol dehydrogenase; aromatic diol oxygenase;  
KW hydratase-aldoase; ss.  
XX  
OS Nocardioides sp. KP7.  
XX  
PN JP2001245662-A.  
XX  
PD 11-SEP-2001.  
XX  
PF 03-MAR-2000; 2000JP-00059523.  
XX  
PR 03-MAR-2000; 2000JP-00059523.  
XX  
PA (KAIY-) KAIYO BIOTECHNOLOGY KENKYUSHO KK.  
XX  
DR WPI; 2002-002935/01.  
XX  
PT Genes and proteins involved in the upstream of the pathway of degradation  
XX of a polycyclic aromatic compound.  
XX  
PS Example 4; Page 7; 47pp; Japanese.  
XX  
CC The present invention relates to coding sequences for proteins such as  
CC aromatic dihydrodiol dehydrogenase, aromatic diol oxygenase, hydratase-  
CC aldoase and aldehyde-dehydrogenase (ABA01198-ABA01201 and AAM52344-  
CC AAM52347), which are involved in the degradation of polycyclic aromatic  
CC compounds. The enzymes are useful as reagents for converting the  
CC metabolite intermediates of polycyclic aromatic compounds such as  
CC phenanthrene and anthracene. The present sequence is a PCR primer, which  
CC was used in an example from the present invention  
XX  
SQ Sequence 20 BP; 3 A; 9 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 603 CCGACCTGCTGCTGCCCCAC 622  
Db 1 CCGAACTGCTCTGCTCGAC 20

RESULT 5018  
ABK90287  
ID ABK90287 standard; DNA; 20 BP.  
XX  
AC ABK90287;  
XX  
DT 21-OCT-2002 (first entry)  
XX  
DE Bcl-2-targeting antisense oligonucleotide #20.  
XX  
KW Antisense; ss; probe; Bcl-2; cell proliferative disorder; cancer; CRE;  
KW CAMP response element; bacterial infection; viral infection;  
KW inflammation; anaphylaxis; allergy; arthritis; asthma; cytostatic;

KW autoimmune disorder; parasitic infection; virucide; hyperplasia;  
KW tumorigenesis; hepatitis B infection; human.  
XX Homo sapiens.  
OS  
XX  
PN WO200257480-A2.  
XX  
PD 25-JUL-2002.  
XX  
PF 22-JAN-2002; 2002WO-US001967.  
XX  
PR 22-JAN-2001; 2001US-0263244P.  
XX  
PA (GENT-) GENTA INC.  
XX  
PI Klem RE;  
XX  
XX WPI; 2002-590754/63.  
DR Hybrid oligomer comprises a cyclic AMP response element sequence and a  
XX sequence that hybridizes to the bcl-2 pre-mRNA or mRNA useful for  
PT preventing or treating cell-proliferative disorders e.g., cancer.  
PT  
XX  
PS Disclosure; Page 13; 78pp; English.  
XX  
CC The invention relates to a hybrid oligomer comprising a cyclic AMP  
CC response element (CRE) sequence and a sequence that hybridizes to the bcl  
CC -2 pre-mRNA or mRNA. Also included are: (1) inhibiting the growth of  
CC cancer cells in vitro, which comprises contacting the cancer cells with a  
CC hybrid oligomer or a bcl-2 antisense oligomer and a CRE decoy oligomer;  
CC (2) treating or preventing cancer in a human, which comprises  
CC administering a hybrid oligomer or a bcl-2 antisense oligomer and a CRE  
CC decoy oligomer; and (3) a pharmaceutical composition comprising a hybrid  
CC oligomer or a bcl-2 antisense oligomer and a CRE decoy oligomer and a  
CC carrier. The pharmaceutical composition of the invention is useful for  
CC preventing or treating cell-proliferative disorders e.g., cancer,  
CC hyperplasia or tumorigenesis and also bacterial infection, viral  
CC infection, inflammation, anaphylaxis, allergy, arthritis, asthma,  
CC autoimmune disorders and parasitic infection. The CRE decoy oligomer and  
CC bcl-2 antisense oligomer are also useful for preventing or treating  
CC hepatitis B virus infection. The hybrid oligomers can also be used for  
CC screening candidate transcription factors or other molecules e.g., gene  
CC regulatory proteins or for diagnostic assays. The present sequence is a  
CC Bcl-2 antisense oligonucleotide  
XX  
SQ Sequence 20 BP; 1 A; 6 C; 13 G; 0 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 49 GCGCGCGCGCGCGCGGCA 68  
Db 1 GCGCGCGCGCGCGCGGCA 20

RESULT 5019  
AAD43244  
ID AAD43244 standard; DNA; 20 BP.  
XX  
AC AAD43244;  
XX  
DT 14-NOV-2002 (first entry)  
XX  
DE Antisense oligonucleotide R51AS5.  
XX  
KW Tumour cell proliferation; Rad51 inhibitor; p53 protein; premature aging;  
KW hyperproliferative disorder; Hodgkin's disease; squamous cell carcinoma;  
KW leukaemia; autoimmune disease; cancer; graft rejection; angioplasty;  
KW inflammatory bowel disease; immunosuppressive; gene therapy; arthritis;  
KW antisense; phosphorothioate backbone; ss.  
XX  
OS Unidentified.



DR WPI; 2002-171819/22.

XX Probes for detecting target nucleotide sequence in sample, has sequence

PT that forms hairpin structure having a double-stranded segment and single-

PT stranded loop collectively forming region complementary to target

PT sequence.

XX

PS Example 5; Page 50; 72pp; English.

XX

CC The present sequence is that of oligonucleotide AGT02021, which contains

CC a single mismatch with a target DNA oligonucleotide (see ABA91531). It is

CC one of a set of oligonucleotides (see ABA91532-37) containing

CC mismatch(es) to the target DNA that were tested in a hybridisation/RNase

CC H cleavage assay. The results showed that 2 mismatches between the target

CC and the probe ablated RNase H cleavage. The effect of one mismatch site

CC was less than that of two mismatch sites, and showed a polarity effect,

CC with weaker inhibition shown in assays with AGT02021 than in assays using

CC an oligonucleotide in which the mismatch was at an adjacent position.

CC Oligonucleotides in which the mismatch was C or A rather than G showed

CC similar inhibition of RNase H cleavage. The invention provides probes for

CC nucleic acid hybridisation. The probes form a hairpin structure

CC comprising a double-stranded stem and a single-stranded loop, and are

CC capable of both intramolecular and intermolecular hybridisation. The

CC double-stranded stem may comprise a methylphosphonate DNA:RNA hybrid that

CC is resistant to RNase H cleavage. When the probe hybridises with a target

CC DNA, the RNA strand in the DNA:RNA duplex becomes sensitive to RNase H

CC treatment and can be removed. Arrays and methods for nucleic acid

CC hybridisation using the probes are provided

XX

SQ Sequence 20 BP; 16 A; 0 C; 1 G; 3 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 4.5e+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 2155 TTTTTCCTCTTTT 2174

Db 20 TTTTTCCTCTTTT 2174

RESULT 5022

ABA91527

ID ABA91527 standard; DNA; 20 BP.

XX

AC ABA91527;

XX

DT 23-APR-2002 (first entry)

XX

DE DNA-RNA-DNA oligonucleotide AGT02008 used to test RNase H cleavage.

XX

KW DNA-RNA hybrid; RNase H; nucleic acid detection; ss.

XX

OS Synthetic.

XX

FH Key Location/Qualifiers

FT misc\_RNA 8.11

FT /tag= a

FT /label= RNA

XX

PN WO200206531-A2.

XX

PD 24-JAN-2002.

XX

PF 12-JUL-2001; 2001WO-US022166.

XX

PR 14-JUL-2000; 2000US-00616761.

PR 30-MAR-2001; 2001US-00823647.

XX

PA (GENE-) APPLIED GENE TECHNOLOGIES INC.

XX

PI Dattagupta N;

XX

DR WPI; 2002-171819/22.

XX

PT Probes for detecting target nucleotide sequence in sample, has sequence

PT that forms hairpin structure having a double-stranded segment and single-

PT stranded loop collectively forming region complementary to target

PT sequence.

XX

PS Example 4; Page 49; 72pp; English.

XX

CC The present sequence is that of DNA-RNA-DNA hybrid oligonucleotide

CC AGT02008. This is one of a set of oligonucleotides (see ABA91527-30) used

CC to assess the minimum number of ribonucleotides in DNA-RNA chimeric

CC oligonucleotides required for RNase H cleavage. Each oligonucleotide of

CC the set had a different number of ribonucleotides, 4 in the present case.

CC The oligonucleotides were mixed with target DNA oligonucleotide AGT02009

CC (see ABA91531) and incubated with RNase H (5 U/ml) at 37 degrees C for 30

CC minutes. The results showed that 4 ribonucleotides were the minimum

CC number for RNA cleavage. The invention provides probes for nucleic acid

CC hybridisation. The probes form a hairpin structure comprising a double-

CC stranded stem and a single-stranded loop, and are capable of both

CC intramolecular and intermolecular hybridisation. The double-stranded stem

CC may comprise a methylphosphonate DNA:RNA hybrid that is resistant to

CC RNase H cleavage. When the probe hybridises with a target DNA, the RNA

CC strand in the DNA:RNA duplex becomes sensitive to RNase H treatment and

CC can be removed. Arrays and methods for nucleic acid hybridisation using

CC the probes are provided

XX

SQ Sequence 20 BP; 4 A; 0 C; 0 G; 16 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 4.5e+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 2155 TTTTTCCTCTTTT 2174

Db 1 TTTTTCCTCTTTT 2174

RESULT 5023

ABA91536/c

ID ABA91536 standard; DNA; 20 BP.

XX

AC ABA91536;

XX

DT 23-APR-2002 (first entry)

XX

DE DNA oligonucleotide AGT02024 used to test RNase H cleavage.

XX

KW Nucleic acid detection; probe; mismatch; ss.

XX

OS Synthetic.

XX

FH Key Location/Qualifiers

FT misc\_feature 12

FT /tag= a

FT /note= "mismatch to target DNA"

XX

PN WO200206531-A2.

XX

PD 24-JAN-2002.

XX

PF 12-JUL-2001; 2001WO-US022166.

XX

PR 14-JUL-2000; 2000US-00616761.

PR 30-MAR-2001; 2001US-00823647.

XX

PA (GENE-) APPLIED GENE TECHNOLOGIES INC.

XX

PI Dattagupta N;

XX

DR WPI; 2002-171819/22.

XX

PT Probes for detecting target nucleotide sequence in sample, has sequence

PT that forms hairpin structure having a double-stranded segment and single-

PT stranded loop collectively forming region complementary to target  
PT sequence.  
XX  
PS Example 5; Page 50; 72pp; English.  
XX  
CC The present sequence is that of oligonucleotide AGT02024, which contains  
CC a single mismatch with a target DNA oligonucleotide (see ABA91531). It is  
CC one of a set of oligonucleotides (see ABA91532-37) containing  
CC mismatch(es) to the target DNA that were tested in a hybridisation/RNase  
CC H cleavage assay. The results showed that 2 mismatches between the target  
CC and the probe ablated RNase H cleavage. The effect of one mismatch site  
CC was less than that of two mismatch sites, and showed a polarity effect,  
CC with weaker inhibition shown in assays with AGT02021 than in assays using  
CC an oligonucleotide in which the mismatch was at an adjacent position.  
CC Oligonucleotides in which the mismatch was G or A rather than C showed  
CC similar inhibition of RNase H cleavage. The invention provides probes for  
CC nucleic acid hybridisation. The probes form a hairpin structure  
CC comprising a double-stranded stem and a single-stranded loop, and are  
CC capable of both intramolecular and intermolecular hybridisation. The  
CC double-stranded stem may comprise a methylphosphonate DNA:RNA hybrid that  
CC is resistant to RNase H cleavage. When the probe hybridises with a target  
CC DNA, the RNA strand in the DNA:RNA duplex becomes sensitive to RNase H  
CC treatment and can be removed. Arrays and methods for nucleic acid  
CC hybridisation using the probes are provided  
XX  
SQ Sequence 20 BP; 16 A; 1 C; 0 G; 3 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 2155 TTTTTCCTCTTTT 2174  
Db 20 TTTTTCCTCTTTT 1  
RESULT 5024  
ABQ65299  
ID ABQ65299 standard; DNA; 20 BP.  
AC ABQ65299;  
XX  
DT 20-AUG-2002 (first entry)  
XX  
DE Human gene methylation status determination method PCR primer #39.  
XX  
KW Toxicological diagnosis; DNA methylation; methylation status;  
KW toxic response; human; PCR; primer; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO200240710-A2.  
XX  
PD 23-MAY-2002.  
XX  
PF 08-NOV-2001; 2001WO-EP012951.  
XX  
PR 14-NOV-2000; 2000DE-01056802.  
XX  
PA (EPIG-) EPIGENOMICS AG.  
XX  
PI Olek A, Piepenbrock C, Berlin K;  
XX  
DR WPI; 2002-463571/49.  
XX  
PT Toxicological diagnosis, useful for diagnosis and prognosis of adverse  
PT reactions, based on effect of test compounds on methylation status of  
PT selected genes, involves determining changes in DNA methylation status.  
XX  
PS Example 2; Page 102; 113pp; German.  
XX  
CC The present invention relates to a method of toxicological diagnosis,  
CC involving taking a DNA-containing sample from an organism or cell culture

CC that has been treated with a test compound and determining any changes in  
CC the DNA methylation status or pattern caused by said test compound. The  
CC method is used for diagnosis and prognosis of adverse toxic responses in  
CC individuals. The present sequence is a PCR primer used to demonstrate the  
CC method of the invention  
XX  
SQ Sequence 20 BP; 8 A; 0 C; 9 G; 3 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 2683 GGTGAAATGGAGATTGGAA 2702  
Db 1 GGGGAAATGGAGAGTGTAA 20  
RESULT 5025  
ABK85429  
ID ABK85429 standard; DNA; 20 BP.  
XX  
AC ABK85429;  
XX  
DT 29-AUG-2003 (revised)  
DT 14-AUG-2002 (first entry)  
XX  
DE Oligonucleotide #7 binding to specific site of HIV-1 RNA.  
XX  
KW Human immunodeficiency virus type 1; HIV-1 detection method; primer;  
KW probe; ss.  
XX  
OS Human immunodeficiency virus 1.  
XX  
PN EP1203826-A2.  
XX  
PD 08-MAY-2002.  
XX  
PF 30-OCT-2001; 2001EP-00125378.  
XX  
PR 30-OCT-2000; 2000JP-00334937.  
XX  
PA (TOYJ ) TOSOH CORP.  
XX  
PI Ishizuka T, Ishiguro T, Saitoh J;  
XX  
DR WPI; 2002-473032/51.  
XX  
PT An oligonucleotide useful for detection of an RNA derived from HIV-1 in  
PT clinical tests and diagnosis.  
XX  
PS Claim 6; Page 14; 34pp; English.  
XX  
CC The present invention relates to oligonucleotides binding to specific  
CC sites of human immunodeficiency virus type 1 (HIV-1) RNA. The  
CC oligonucleotides are useful for detecting HIV-1 in clinical tests and  
CC diagnosis. The oligonucleotides provide simple, speedy and sensitive  
CC detection of HIV-1 RNA which can bind to an intramolecularly free region  
CC of the genomic RNA of HIV-1 at relatively low and constant temperatures.  
CC The detection method comprises synthesising a cDNA by the action of an  
CC RNA-dependent DNA polymerase using a specific sequence in an RNA  
CC derived from HIV-1 anticipated in a sample as a template, a first primer  
CC containing a sequence complementary to the specific sequence and a second  
CC primer containing a sequence homologous to the specific sequence (either  
CC of which additionally has a promoter sequence for the RNA polymerase at  
CC the 5'end). ABK85423-ABK85440 represent oligonucleotides binding to  
CC specific sites of HIV-1 RNA. They can be used either as first primers or  
CC probes. (Updated on 29-AUG-2003 to standardise OS field)  
XX  
SQ Sequence 20 BP; 1 A; 2 C; 1 G; 16 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;



QY	2155	TTTTTCTCCCTTTTTTTT	2174	
Db	1	TTTTTCTTACTTTTGTTT	20	
RESULT 5026				
AAD41025	AAD41025 standard; DNA; 20 BP.			
XX	AC	AAD41025;		
XX	DT	30-OCT-2002	(first entry)	
XX	DE	Mouse PI3K p85 antisense oligonucleotide	ISIS #131418.	
XX	KW	Mouse; antisense; PI3K p85; obesity; type 2 diabetes; cancer; tumour; prophylaxis; hyperproliferative condition; infection; inflammation; therapy; phosphorothioate; ss.		
XX	OS	Mus musculus.		
XX	OS	Synthetic.		
XX	FH	Key	Location/Qualifiers	
FT	FT	modified_base	1. .20	
FT	FT		/tag= a	
FT	FT		/mod_base= OTHER	
FT	FT		/note= "Phosphorothioate backbone"	
FT	FT	modified_base	1. .5	
FT	FT		/tag= b	
FT	FT		/mod_base= OTHER	
FT	FT		/note= "2'-methoxyethyl nucleotides"	
FT	FT	modified_base	1. .2	
FT	FT		/tag= d	
FT	FT		/mod_base= m5c	
FT	FT	modified_base	5	
FT	FT		/tag= e	
FT	FT		/mod_base= m5c	
FT	FT	modified_base	16. .20	
FT	FT		/tag= c	
FT	FT		/mod_base= OTHER	
FT	FT		/note= "2'-methoxyethyl nucleotides"	
FT	FT	modified_base	17	
FT	FT		/tag= f	
FT	FT		/mod_base= m5c	
FT	FT	modified_base	19	
FT	FT		/tag= g	
FT	FT		/mod_base= m5c	
XX	PN	WO200240637-A2.		
XX	XX	23-MAY-2002.		
PD	XX			
XX	PF	19-NOV-2001; 2001WO-US045006.		
XX	XX			
PR	XX	20-NOV-2000; 2000US-00715983.		
XX	PA	(ISIS-) ISIS PHARM INC.		
XX	PI	Monia BP, Cowsert LM, Murray SF, Butler MM, Dean NM;		
XX	XX			
DR	XX	WPI; 2002-519374/55.		
XX	PT	Antisense compounds targeted against polynucleotides encoding PI3K p85		
XX	PT	useful for treating e.g. cancer, Type 2 diabetes, obesity.		
XX	XX			
PS	XX	Example 18; Page 81; 121pp; English.		
XX	CC	The invention relates to antisense compounds targetted to a nucleic acid		
XX	CC	molecule encoding PI3K p85 to inhibits its expression. Antisense		
XX	CC	compounds of the invention are used for treating obesity, Type 2 diabetes		
XX	CC	and hyperproliferative condition e.g. cancer. They may also be useful		
XX	CC	prophylactically, e.g. to prevent or delay infection, inflammation or		
tumour formation. Antisense compounds either alone or in combination with other antisense compounds or therapeutics can be used as tools in differential and/or combinatorial analyses to elucidate expression patterns of a portion or the entire complement of genes expressed within cells and tissues. They are commonly used as research reagents and diagnostics. The present sequence is an antisense oligonucleotide targetted to mouse PI3K p85 DNA				
XX	XX	Sequence	20 BP; 3 A; 5 C; 5 G; 7 T; 0 U; 0 Other;	
XX	XX	Query Match	0.5%; Score 13.6; DB 1; Length 20;	
XX	XX	Best Local Similarity	80.0%; Pred. No. 4.5e+03;	
XX	XX	Matches	16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;	
QY	2110	CCTTCTGGTTTGTAGAACT	2129	
Db	1	CCTGCTGGTATTGGACACT	20	
RESULT 5027				
AAD40874	AAD40874 standard; DNA; 20 BP.			
XX	AC	AAD40874;		
XX	DT	30-OCT-2002	(first entry)	
XX	DE	Human hepsin antisense oligonucleotide, ISIS 107148.		
XX	KW	Human; hepsin; antisense compound; antisense therapy; antisense; phosphorothioate backbone; ss.		
XX	OS	Homo sapiens.		
XX	OS	Synthetic.		
XX	FH	Key	Location/Qualifiers	
FT	FT	modified_base	1. .20	
FT	FT		/tag= a	
FT	FT		/mod_base= OTHER	
FT	FT		/note= "Phosphorothioate backbone"	
FT	FT	modified_base	1. .5	
FT	FT		/tag= b	
FT	FT		/mod_base= OTHER	
FT	FT		/note= "2'-methoxyethyl nucleotides"	
FT	FT	modified_base	2	
FT	FT		/tag= d	
FT	FT		/mod_base= m5c	
FT	FT	modified_base	3	
FT	FT		/tag= e	
FT	FT		/mod_base= m5c	
FT	FT	modified_base	6	
FT	FT		/tag= f	
FT	FT		/mod_base= m5c	
FT	FT	modified_base	16. .20	
FT	FT		/tag= c	
FT	FT		/mod_base= OTHER	
FT	FT		/note= "2'-methoxyethyl nucleotides"	
XX	PN	WO200250247-A2.		
XX	XX	27-JUN-2002.		
PD	XX			
XX	PF	14-DEC-2001; 2001WO-US048341.		
XX	XX			
PR	XX	20-DEC-2000; 2000US-00742482.		
XX	XX	(ISIS-) ISIS PHARM INC.		
XX	PA	Cowsert LM;		
XX	PI	WPI; 2002-519882/55.		
XX	DR	Novel antisense compound targeted to nucleic acids encoding human hepsin,		

PT useful for inhibiting the expression of hepsin in human cells or tissues,  
PT and for treating humans having a disease associated with human hepsin.  
XX  
PS Example 15; Page 100; 100pp; English.

XX The invention relates to antisense compounds, compositions and methods  
CC for modulating the expression of hepsin. The compositions comprise  
CC antisense compounds, particularly antisense oligonucleotides, targeted  
CC to nucleic acids encoding hepsin. The antisense compound is useful for  
CC inhibiting the expression of hepsin in human cells or tissues. It is also  
CC useful for treating an animal having a disease or condition associated  
CC with hepsin, by inhibiting expression of hepsin. It is useful for  
CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.  
CC It is also used in antisense therapy. The present sequence is an  
CC antisense oligonucleotide targeted to human hepsin DNA. This sequence is  
CC used in the exemplification of the invention  
XX

SQ Sequence 20 BP; 7 A; 3 C; 1 G; 9 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1627 ACCTACCTTACTATTAAAG 1646  
Db 1 ACCATCTTTATTATTAAAG 20

RESULT 5028  
AAS96809  
ID AAS96809 standard; DNA; 20 BP.  
XX  
AC AAS96809;  
XX  
DT 26-FEB-2002 (first entry)  
XX  
DE Human STAT3 antisense phosphorothioate oligodeoxynucleotide #42.  
XX  
KW STAT3; human; signal transducer and activator of transcription; ss; STAT;  
KW antisense gene therapy; Fas-mediated apoptosis; inflammatory disease;  
KW autoimmune disease; rheumatoid arthritis; cancer; breast; prostate; head;  
KW neck; brain; leukaemia; myeloma; melanoma; lymphoma; apoptosis;  
KW antiinflammatory; immunosuppressive; antirheumatic; antiarthritic;  
KW cytostatic.

XX Homo sapiens.  
OS Synthetic.  
OS  
XX US2001029250-A1.  
XX  
PD 11-OCT-2001.  
XX  
PF 11-JAN-2001; 2001US-00758881.  
XX  
PR 08-APR-1999; 99US-00288461.  
PR 06-APR-2000; 2000WO-US009054.  
XX  
PA (KARR/) KARRAS J G.

XX Karras JG;  
PI  
XX WPI; 2002-009991/01.  
DR  
XX Novel antisense compound useful for treating and diagnosing inflammatory  
PT diseases and cancers, is targeted to a nucleic acid molecule encoding  
PT signal transducer and activator of transcription proteins.  
PT  
XX

PS Example 2; Page 13; 21pp; English.  
XX  
CC The invention relates to antisense compounds targeted to a nucleic acid  
CC molecule encoding a signal transducer and activator of transcription  
CC (STAT) protein, specifically STAT3, where the antisense compounds inhibit  
CC the expression of STAT3. The antisense sequences are useful for

CC inhibiting the expression of STAT3 in cells or tissues, inducing Fas-  
CC mediated apoptosis in cells, and sensitising cells to apoptosis. They are  
CC also useful for treating an animal having a disease or condition  
CC associated with STAT3. These disorders include inflammatory or autoimmune  
CC disease, particularly rheumatoid arthritis, cancers, such as those of the  
CC breast, prostate, brain and head and neck and leukaemias, myelomas,  
CC melanomas and lymphomas. Also treatable are human diseases or conditions  
CC characterised by a reduction in apoptosis or an insensitivity to  
CC apoptotic signals. The sequences of the invention can be used in clinical  
CC research, for detecting and determining the role of STAT3 in various cell  
CC functions and physiological processes and for diagnosing conditions  
CC associated with the expression of STAT3. The sequences represent cDNA  
CC encoding human STAT3 and human STAT3 oligonucleotides  
XX

SQ Sequence 20 BP; 5 A; 3 C; 7 G; 5 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1741 TGACAAAGTACTGGCTCTTTA 1760  
Db 1 TGACAAAGGAGTGGGTCTCTA 20

RESULT 5029  
AAS97811  
ID AAS97811 standard; DNA; 20 BP.  
XX  
AC AAS97811;  
XX  
DT 12-MAR-2002 (first entry)  
XX  
DE Murine SAC1 gene-specific oligonucleotide PCR primer #378.  
XX

KW Human; mouse; SAC1; carbohydrate; sweetener; ethanol; alcoholism; ss;  
KW obesity; diabetes; transgenic embryo; body tissue; body fluid; pancreas;  
KW blood; tongue; PCR primer; anorectic; antidiabetic; gene therapy;  
KW protein replacement therapy.

XX Mus sp.  
XX WO200183749-A2.

XX 08-NOV-2001.  
XX  
PF 25-APR-2001; 2001WO-US013387.  
XX  
PR 28-APR-2000; 2000US-0200794P.  
PR 28-JUL-2000; 2000US-0221419P.  
PR 10-NOV-2000; 2000US-0247443P.

XX (WARN ) WARNER LAMBERT CO.  
PA (MONE-) MONELL CHEM SENSES CENT.

XX Bachmanov AA, Beauchamp GK, Chatterjee A, De Jong PJ, Li S, Li X;  
PI Ohmen JD, Reed DR, Ross D, Tordoff MG;  
XX WPI; 2002-075162/10.  
DR

XX Novel isolated polypeptide comprising variant form of mouse or human SAC1  
PT polypeptide, and is associated with altered preference for carbohydrates  
PT or other sweeteners, useful for preventing obesity, diabetes, alcoholism.

PS Claim 14; Page 88; 239pp; English.

XX The invention relates to an isolated polypeptide, comprising a variant  
CC form of mouse or human SAC1 polypeptide. The variant form is associated  
CC with altered preference for carbohydrates, other sweeteners or ethanol.  
CC The polypeptide and its associated DNA sequence can be produced by  
CC recombinant techniques and is useful for preventing obesity, diabetes or  
CC alcoholism associated with SAC1 expression. The sequences are useful in  
CC screening for drugs and sweeteners. Recombinant cell lines and transgenic

CC embryos may be used in screening for and identifying agents that induce  
CC or repress function of SAC1. Predisposition to diabetes, obesity or  
CC alcoholism can be ascertained by testing any fluid or tissue of a human  
CC (such as blood, pancreas or tongue) for sequence variations of the SAC1  
CC gene. A sequence variation of the SAC1 locus may indicate a  
CC predisposition to diabetes, obesity and/or alcoholism and may provide a  
CC diagnostic mark. The polynucleotide can be detected in a biological  
CC sample by contacting the DNA with a probe to form a hybridisation complex  
CC which is then detected. The sequences represent cDNA encoding human and  
CC mouse SAC1 polypeptides and PCR primers specific for the SAC1 genes  
XX  
SQ Sequence 20 BP; 7 A; 7 C; 2 G; 4 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 1562 ACTGCAAAATCCTTCTCCA 1581  
Db 1 ACTGCAATGTCCAACTCCA 20  
  
RESULT 5030  
AAS97626/c  
ID AAS97626 standard; DNA; 20 BP.  
XX  
AC AAS97626;  
XX  
DT 12-MAR-2002 (first entry)  
XX  
DE Murine SAC1 gene-specific oligonucleotide PCR primer #231.  
XX  
KW Human; mouse; SAC1; carbohydrate; sweetener; ethanol; alcoholism; ss;  
KW obesity; diabetes; transgenic embryo; body tissue; body fluid; pancreas;  
KW blood; tongue; PCR primer; anorectic; antidiabetic; gene therapy;  
KW protein replacement therapy.  
XX  
OS Mus sp.  
XX  
PN WO200183749-A2.  
XX  
PD 08-NOV-2001.  
XX  
PF 25-APR-2001; 2001WO-US013387.  
XX  
PR 28-APR-2000; 2000US-0200794P.  
PR 28-JUL-2000; 2000US-0221419P.  
PR 10-NOV-2000; 2000US-0247443P.  
XX  
PA (WARN ) WARNER LAMBERT CO.  
PA (MONE-) MONELL CHEM SENSES CENT.  
XX  
PI Bachmanov AA, Beauchamp GK, Chatterjee A, De Jong PJ, Li S, Li X;  
PI Ohmen JD, Reed DR, Ross D, Tordoff MG;  
XX  
DR WPI; 2002-075162/10.  
XX  
PT Novel isolated polypeptide comprising variant form of mouse or human SAC1  
PT polypeptide, and is associated with altered preference for carbohydrates  
PT or other sweeteners, useful for preventing obesity, diabetes, alcoholism.  
XX  
PS Claim 14; Page 82; 239pp; English.  
XX  
CC The invention relates to an isolated polypeptide, comprising a variant  
CC form of mouse or human SAC1 polypeptide. The variant form is associated  
CC with altered preference for carbohydrates; other sweeteners or ethanol.  
CC The polypeptide and its associated DNA sequence can be produced by  
CC recombinant techniques and is useful for preventing obesity, diabetes or  
CC alcoholism associated with SAC1 expression. The sequences are useful in  
CC screening for drugs and sweeteners. Recombinant cell lines and transgenic  
CC embryos may be used in screening for and identifying agents that induce  
CC or repress function of SAC1. Predisposition to diabetes, obesity or  
CC alcoholism can be ascertained by testing any fluid or tissue of a human

CC (such as blood, pancreas or tongue) for sequence variations of the SAC1  
CC gene. A sequence variation of the SAC1 locus may indicate a  
CC predisposition to diabetes, obesity and/or alcoholism and may provide a  
CC diagnostic mark. The polynucleotide can be detected in a biological  
CC sample by contacting the DNA with a probe to form a hybridisation complex  
CC which is then detected. The sequences represent cDNA encoding human and  
CC mouse SAC1 polypeptides and PCR primers specific for the SAC1 genes  
XX  
SQ Sequence 20 BP; 10 A; 3 C; 7 G; 0 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 1331 TGCTTGCTCATTTTCAGCCT 1350  
Db 20 TCCTTGCTGCTTTCTGCCT 1  
  
RESULT 5031  
ABK37098/c  
ID ABK37098 standard; DNA; 20 BP.  
XX  
AC ABK37098;  
XX  
DT 08-MAY-2002 (first entry)  
XX  
DE Human lysophospholipase I gene, antisense oligonucleotide #50.  
XX  
KW Human; mouse; antiinflammatory; antiarteriosclerotic; vasotropic;  
KW antilipaeamic; cardiant; lysophospholipase I; inflammation; ischaemia;  
KW hyperlipidaemia; cardiovascular disorder; atherosclerosis;  
KW antisense gene therapy; primer; ss.  
XX  
OS Homc sapiens.  
OS Synthetic.  
XX  
PN WO200210185-A1.  
XX  
PD 07-FEB-2002.  
XX  
PF 20-JUL-2001; 2001WO-US022975.  
XX  
PR 31-JUL-2000; 2000US-00629645.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Bennett CF, Wyatt JR;  
XX  
DR WPI; 2002-188720/24.  
XX  
PT Novel antisense compound useful for treating inflammation,  
PT hyperlipidemia, and cardiovascular disorders such as atherosclerosis and  
PT myocardial ischemia, inhibits Lysophospholipase I.  
XX  
PS Claim 3; Page 80; 131pp; English.  
XX  
CC The invention relates to an antisense compound (I) 8-30 nucleobases in  
CC length targeted to a nucleic acid molecule encoding lysophospholipase I  
CC (II), where (I) specifically hybridises with and inhibits the expression  
CC of (II). (I) is useful for inhibiting the expression of (II) in cells or  
CC tissues, and for treating a human having a disease or condition  
CC associated with Lysophospholipase I e.g. inflammation, hyperlipidaemia,  
CC and cardiovascular disorders such as atherosclerosis and myocardial  
CC ischaemia. (I) is useful as research reagent and diagnostics. (I) is also  
CC useful for distinguishing functions of various members of a biological  
CC pathway. (I) is useful in antisense gene therapy. ABK37028-ABK37191  
CC represent lysophospholipase I coding sequences, antisense  
CC oligonucleotides and related PCR primers of the invention. Note:  
CC Antisense oligonucleotides are modified such that bases 1-5 and 16-20 are  
CC 2'-methoxyethyl (2'-MOE) nucleotides, all bases have phosphorothioate  
CC linkages, and all cytidines are 5-methyl cytidines  
XX

SQ Sequence 20 BP; 9 A; 4 C; 4 G; 3 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 2344 CCGTGGAGGTTCTGTATTT 2363  
Db |||||  
20 CCATGCAGTGTCTGTATTT 1  
RESULT 5032  
ABK37112  
ID ABK37112 standard; DNA; 20 BP.  
XX  
AC ABK37112;  
XX  
DT 08-MAY-2002 (first entry)  
XX  
DE Human lysophospholipase I gene, antisense oligonucleotide #64.  
XX  
KW Human; mouse; antiinflammatory; antiarteriosclerotic; vasotropic;  
KW antilipaemic; cardiant; lysophospholipase I; inflammation; ischaemia;  
KW hyperlipidaemia; cardiovascular disorder; atherosclerosis;  
KW antisense gene therapy; primer; ss.  
XX  
OS Homo sapiens.  
OS Synthetic.  
XX  
PN WO200210185-A1.  
XX  
PD 07-FEB-2002.  
XX  
PF 20-JUL-2001; 2001WO-US022975.  
XX  
PR 31-JUL-2000; 2000US-00629645.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Bennett CF, Wyatt JR;  
XX  
DR WPI; 2002-188720/24.  
XX  
PT Novel antisense compound useful for treating inflammation,  
PT hyperlipidemia, and cardiovascular disorders such as atherosclerosis and  
PT myocardial ischemia, inhibits Lysophospholipase I.  
XX  
PS Example 15; Page 80; 131pp; English.  
XX  
CC The invention relates to an antisense compound (I) 8-30 nucleobases in  
CC length targeted to a nucleic acid molecule encoding lysophospholipase I  
CC (II), where (I) specifically hybridises with and inhibits the expression  
CC of (II). (I) is useful for inhibiting the expression of (II) in cells or  
CC tissues, and for treating a human having a disease or condition  
CC associated with Lysophospholipase I e.g. inflammation, hyperlipidaemia,  
CC and cardiovascular disorders such as atherosclerosis and myocardial  
CC ischaemia. (I) is useful as research reagent and diagnostics. (I) is also  
CC useful for distinguishing functions of various members of a biological  
CC pathway. (I) is useful in antisense gene therapy. ABK37028-ABK37191  
CC represent lysophospholipase I coding sequences, antisense  
CC oligonucleotides and related PCR primers of the invention. Note:  
CC Antisense oligonucleotides are modified such that bases 1-5 and 16-20 are  
CC 2'-methoxyethyl (2'-MOE) nucleotides, all bases have phosphorothioate  
CC linkages, and all cytidines are 5-methyl cytidines  
SQ Sequence 20 BP; 7 A; 2 C; 2 G; 9 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 2512 CATAAGGTTTATTTCATATA 2531  
|||||

Db 1 CATAAGTTTGTTCATAATA 20  
RESULT 5033  
ABK37064  
ID ABK37064 standard; DNA; 20 BP.  
XX  
AC ABK37064;  
XX  
DT 08-MAY-2002 (first entry)  
XX  
DE Human lysophospholipase I gene, antisense oligonucleotide #16.  
XX  
KW Human; mouse; antiinflammatory; antiarteriosclerotic; vasotropic;  
KW antilipaemic; cardiant; lysophospholipase I; inflammation; ischaemia;  
KW hyperlipidaemia; cardiovascular disorder; atherosclerosis;  
KW antisense gene therapy; primer; ss.  
XX  
OS Homo sapiens.  
OS Synthetic.  
XX  
PN WO200210185-A1.  
XX  
PD 07-FEB-2002.  
XX  
PF 20-JUL-2001; 2001WO-US022975.  
XX  
PR 31-JUL-2000; 2000US-00629645.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Bennett CF, Wyatt JR;  
XX  
DR WPI; 2002-188720/24.  
XX  
PT Novel antisense compound useful for treating inflammation,  
PT hyperlipidemia, and cardiovascular disorders such as atherosclerosis and  
PT myocardial ischemia, inhibits Lysophospholipase I.  
XX  
PS Claim 3; Page 79; 131pp; English.  
XX  
CC The invention relates to an antisense compound (I) 8-30 nucleobases in  
CC length targeted to a nucleic acid molecule encoding lysophospholipase I  
CC (II), where (I) specifically hybridises with and inhibits the expression  
CC of (II). (I) is useful for inhibiting the expression of (II) in cells or  
CC tissues, and for treating a human having a disease or condition  
CC associated with Lysophospholipase I e.g. inflammation, hyperlipidaemia,  
CC and cardiovascular disorders such as atherosclerosis and myocardial  
CC ischaemia. (I) is useful as research reagent and diagnostics. (I) is also  
CC useful for distinguishing functions of various members of a biological  
CC pathway. (I) is useful in antisense gene therapy. ABK37028-ABK37191  
CC represent lysophospholipase I coding sequences, antisense  
CC oligonucleotides and related PCR primers of the invention. Note:  
CC Antisense oligonucleotides are modified such that bases 1-5 and 16-20 are  
CC 2'-methoxyethyl (2'-MOE) nucleotides, all bases have phosphorothioate  
CC linkages, and all cytidines are 5-methyl cytidines  
SQ Sequence 20 BP; 4 A; 6 C; 2 G; 8 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 1782 GAACCCCATTCCTTCTTCT 1801  
|||||  
Db 1 GAATGCCATTCTTCACTTCT 20  
RESULT 5034  
AAD41793/c  
ID AAD41793 standard; DNA; 20 BP.  
XX  
AC AAD41793;



XX 30-OCT-2002 (first entry)  
XX Human RECQL2 antisense oligonucleotide, ISIS #137573.  
DE Antisense; RECQL2; Bloom's disorder; prophylaxis; infection; tumour;  
XX inflammation; therapy; human; phosphorothioate; ss.  
KW Homo sapiens.  
XX Synthetic.  
OS Key  
OS modified\_base Location/Qualifiers  
FH 1. .20 /tag= a  
FT /mod\_base= OTHER  
FT /note= "Phosphorothioate backbone"  
FT modified\_base 1. .5  
FT /tag= b  
FT /mod\_base= OTHER  
FT /note= "2'-methoxyethyl nucleotides"  
FT modified\_base 1 /tag= d  
FT /mod\_base= m5c  
FT modified\_base 3 /tag= e  
FT /mod\_base= m5c  
FT modified\_base 10. .11 /tag= f  
FT /mod\_base= m5c  
FT modified\_base 15 /tag= g  
FT /mod\_base= m5c  
FT modified\_base 16. .20 /tag= c  
FT /mod\_base= OTHER  
FT /note= "2'-methoxyethyl nucleotides"  
FT modified\_base 18. .19 /tag= h  
FT /mod\_base= m5c  
XX US6399378-B1.  
PN 04-JUN-2002.  
XX 01-MAR-2001; 2001US-00798096.  
XX 01-MAR-2001; 2001US-00798096.  
XX (ISIS-) ISIS PHARM INC.  
XX Ward DT, Watt AT;  
PI WPI; 2002-535979/57.  
XX Antisense compounds targeted to nucleic acids encoding RECQL2 associated  
DR with Bloom's disorder, for modulating RECQL2 expression and treating  
XX diseases e.g. tumors associated with expression of the RECQL2 in humans.  
PS Claim 3; Col 45; 86pp; English.  
XX The invention relates to antisense compounds targetted to nucleic acid  
CC encoding RECQL2 (gene associated with Bloom's disorder) to inhibit the  
CC expression of RECQL2. Antisense compounds of the invention are useful for  
CC treating diseases associated with expression of RECQL2, in humans. They  
CC are useful for diagnostics, therapeutics and as research reagent, e.g.  
CC prophylactically to prevent or delay infection, inflammation or tumour  
CC formation. They are also useful in antisense therapy. The present  
CC sequence is an antisense oligonucleotide targetted to human RECQL2 DNA  
XX Sequence 20 BP; 8 A; 7 C; 3 G; 2 T; 0 U; 0 Other;  
SQ Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
Qy 1366 TGGCAGCCAGGCCATCTGTG 1385  
|||||  
Db 20 TGGCTGTCAGGTTATCTGTG 1  
RESULT 5035  
ABS77869/c  
ID ABS77869 standard; DNA; 20 BP.  
XX  
AC ABS77869;  
XX  
DT 13-DEC-2002 (first entry)  
XX  
DE Angiogenesis inhibitory oligonucleotide #353.  
XX  
KW Angiogenesis inhibitor; ss; angiogenesis; solid tumour growth;  
KW tumour metastasis; precancerous lesion; rheumatoid arthritis; psoriasis;  
KW diabetic retinopathy; retinopathy of prematurity; macular degeneration;  
KW corneal graft rejection; neovascular glaucoma; retrolental fibroplasia;  
KW rubeosis; Osler-Webber Syndrome; myocardial angiogenesis;  
KW plaque neovascularisation; telangiectasia; haemophilic joint;  
KW angiofibroma; wound granulation; intestinal adhesion; atherosclerosis;  
KW scleroderma; hypertrophic scar.  
XX Synthetic.  
OS WO200253141-A2.  
XX  
PN 11-JUL-2002.  
XX  
PD 14-DEC-2001; 2001WO-US048458.  
XX  
PF 14-DEC-2000; 2000US-0255534P.  
XX  
PR (COLE-) COLEY PHARM GROUP INC.  
XX  
PA Bratzler RL;  
XX  
PI WPI; 2002-566690/60.  
XX  
DR Inhibiting angiogenesis in a subject, involves administering at least one  
XX antiangiogenic nucleic acid molecule to the subject.  
PT Claim 2; Page 25; 276pp; English.  
XX  
PS The invention relates to inhibiting angiogenesis in a subject, comprising  
XX administering at least one antiangiogenic nucleic acid molecule. Also  
CC included is a kit comprising a first container housing the antiangiogenic  
CC nucleic acids, and instructions for administering them to a subject  
CC having a condition characterised by unwanted angiogenesis. The method is  
CC useful for inhibiting angiogenesis associated with solid tumour growth,  
CC tumour metastasis, precancerous lesion, rheumatoid arthritis, psoriasis,  
CC diabetic retinopathy, retinopathy of prematurity, macular degeneration,  
CC corneal graft rejection, neovascular glaucoma, retrolental fibroplasia,  
CC rubeosis, Osler-Webber Syndrome, myocardial angiogenesis, plaque  
CC neovascularisation, telangiectasia, haemophilic joints, angiofibroma, and  
CC wound granulation, intestinal adhesions, atherosclerosis, scleroderma and  
CC hypertrophic scars. The present sequence is an antiangiogenic nucleic  
CC acid of the invention  
XX Sequence 20 BP; 2 A; 8 C; 2 G; 8 T; 0 U; 0 Other;  
SQ Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
Qy 1543 AGAGTAGGGAAGGAACAGGA 1562  
|||||  
Db 20 AGACTGAGGAAGGAAGTGA 1

RESULT 5036  
ABS78371/c  
ID ABS78371 standard; DNA; 20 BP.  
XX  
AC ABS78371;  
XX  
XX  
DT 13-DEC-2002 (first entry)  
XX  
DE Angiogenesis inhibitory oligonucleotide #855.  
XX  
KW Angiogenesis inhibitor; ss; angiogenesis; solid tumour growth;  
KW tumour metastasis; precancerous lesion; rheumatoid arthritis; psoriasis;  
KW diabetic retinopathy; retinopathy of prematurity; macular degeneration;  
KW corneal graft rejection; neovascular glaucoma; retrolental fibroplasia;  
KW rubeosis; Osler-Webber Syndrome; myocardial angiogenesis;  
KW plaque neovascularisation; telangiectasia; haemophilic joint;  
KW angiofibroma; wound granulation; intestinal adhesion; atherosclerosis;  
KW scleroderma; hypertrophic scar.  
XX  
OS Synthetic.  
XX  
PN WO200253141-A2.  
PD 11-JUL-2002.  
XX  
PF 14-DEC-2001; 2001WO-US048458.  
XX  
PR 14-DEC-2000; 2000US-0255534P.  
XX  
XX (COLE-) COLEY PHARM GROUP INC.  
PA  
PI Bratzler RL;  
XX  
XX WPI; 2002-566690/60.  
DR  
XX  
XX Inhibiting angiogenesis in a subject, involves administering at least one  
PT antiangiogenic nucleic acid molecule to the subject.  
XX  
PS Claim 2; Page 34; 276pp; English.  
XX  
CC The invention relates to inhibiting angiogenesis in a subject, comprising  
CC administering at least one antiangiogenic nucleic acid molecule. Also  
CC included is a kit comprising a first container housing the antiangiogenic  
CC nucleic acids, and instructions for administering them to a subject  
CC having a condition characterised by unwanted angiogenesis. The method is  
CC useful for inhibiting angiogenesis associated with solid tumour growth,  
CC tumour metastasis, precancerous lesion, rheumatoid arthritis, psoriasis,  
CC diabetic retinopathy, retinopathy of prematurity, macular degeneration,  
CC corneal graft rejection, neovascular glaucoma, retrolental fibroplasia,  
CC rubeosis, Osler-Webber Syndrome, myocardial angiogenesis, plaque  
CC neovascularisation, telangiectasia, haemophilic joints, angiofibroma,  
CC wound granulation, intestinal adhesions, atherosclerosis, scleroderma and  
CC hypertrophic scars. The present sequence is an antiangiogenic nucleic  
CC acid of the invention  
XX  
SQ Sequence 20 BP; 12 A; 3 C; 2 G; 3 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 1776 TTTTGTGAACCCCATTCCTT 1795  
Db 20 TTTTGTGAACGTCATGTTT 1  
RESULT 5037  
ABS78292  
ID ABS78292 standard; DNA; 20 BP.  
XX  
AC ABS78292;  
XX  
XX  
DT 13-DEC-2002 (first entry)

XX  
DE  
XX  
KW Angiogenesis inhibitory oligonucleotide #776.  
KW Angiogenesis inhibitor; ss; angiogenesis; solid tumour growth;  
KW tumour metastasis; precancerous lesion; rheumatoid arthritis; psoriasis;  
KW diabetic retinopathy; retinopathy of prematurity; macular degeneration;  
KW corneal graft rejection; neovascular glaucoma; retrolental fibroplasia;  
KW rubeosis; Osler-Webber Syndrome; myocardial angiogenesis;  
KW plaque neovascularisation; telangiectasia; haemophilic joint;  
KW angiofibroma; wound granulation; intestinal adhesion; atherosclerosis;  
KW scleroderma; hypertrophic scar.  
XX  
OS Synthetic.  
XX  
PN WO200253141-A2.  
PD 11-JUL-2002.  
XX  
PF 14-DEC-2001; 2001WO-US048458.  
XX  
PR 14-DEC-2000; 2000US-0255534P.  
XX  
XX (COLE-) COLEY PHARM GROUP INC.  
PA  
PI Bratzler RL;  
XX  
XX WPI; 2002-566690/60.  
DR  
XX  
XX Inhibiting angiogenesis in a subject, involves administering at least one  
PT antiangiogenic nucleic acid molecule to the subject.  
XX  
PS Claim 2; Page 33; 276pp; English.  
XX  
CC The invention relates to inhibiting angiogenesis in a subject, comprising  
CC administering at least one antiangiogenic nucleic acid molecule. Also  
CC included is a kit comprising a first container housing the antiangiogenic  
CC nucleic acids, and instructions for administering them to a subject  
CC having a condition characterised by unwanted angiogenesis. The method is  
CC useful for inhibiting angiogenesis associated with solid tumour growth,  
CC tumour metastasis, precancerous lesion, rheumatoid arthritis, psoriasis,  
CC diabetic retinopathy, retinopathy of prematurity, macular degeneration,  
CC corneal graft rejection, neovascular glaucoma, retrolental fibroplasia,  
CC rubeosis, Osler-Webber Syndrome, myocardial angiogenesis, plaque  
CC neovascularisation, telangiectasia, haemophilic joints, angiofibroma,  
CC wound granulation, intestinal adhesions, atherosclerosis, scleroderma and  
CC hypertrophic scars. The present sequence is an antiangiogenic nucleic  
CC acid of the invention  
XX  
SQ Sequence 20 BP; 13 A; 2 C; 2 G; 3 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 1966 AATATTTACCTTGAAAAA 1985  
Db 1 AAAATCAACGTTGAAAAA 20  
RESULT 5038  
ABS78041/c  
ID ABS78041 standard; DNA; 20 BP.  
XX  
AC ABS78041;  
XX  
DT 13-DEC-2002 (first entry)  
XX  
DE Angiogenesis inhibitory oligonucleotide #525.  
XX  
KW Angiogenesis inhibitor; ss; angiogenesis; solid tumour growth;  
KW tumour metastasis; precancerous lesion; rheumatoid arthritis; psoriasis;  
KW diabetic retinopathy; retinopathy of prematurity; macular degeneration;  
KW corneal graft rejection; neovascular glaucoma; retrolental fibroplasia;

KW rubeosis; Osler-Webber Syndrome; myocardial angiogenesis;  
KW plaque neovascularisation; telangiectasia; haemophiliac joint;  
KW angiofibroma; wound granulation; intestinal adhesion; atherosclerosis;  
KW scleroderma; hypertrophic scar.  
XX  
OS Synthetic.  
XX  
XX WO200253141-A2.  
PN  
XX  
PD 11-JUL-2002.  
XX  
XX  
PF 14-DEC-2001; 2001WO-US048458.  
XX  
XX 14-DEC-2000; 2000US-0255534P.  
PR  
XX  
XX (COLE-) COLEY PHARM GROUP INC.  
PA  
XX  
XX Bratzler RL;  
PI  
XX  
XX WPI; 2002-566690/60.  
DR  
XX  
XX Inhibiting angiogenesis in a subject, involves administering at least one  
PT antiangiogenic nucleic acid molecule to the subject.  
PT  
XX  
XX Claim 2; Page 28; 276pp; English.  
PS  
XX  
XX The invention relates to inhibiting angiogenesis in a subject, comprising  
CC administering at least one antiangiogenic nucleic acid molecule. Also  
CC included is a kit comprising a first container housing the antiangiogenic  
CC nucleic acids, and instructions for administering them to a subject  
CC having a condition characterised by unwanted angiogenesis. The method is  
CC useful for inhibiting angiogenesis associated with solid tumour growth,  
CC tumour metastasis, precancerous lesion, rheumatoid arthritis, psoriasis,  
CC diabetic retinopathy, retinopathy of prematurity, macular degeneration,  
CC corneal graft rejection, neovascular glaucoma, retrolental fibroplasia,  
CC rubeosis, Osler-Webber Syndrome, myocardial angiogenesis, plaque  
CC neovascularisation, telangiectasia, haemophiliac joints, angiofibroma,  
CC wound granulation, intestinal adhesions, atherosclerosis, scleroderma and  
CC hypertrophic scars. The present sequence is an antiangiogenic nucleic  
CC acid of the invention  
XX  
SQ Sequence 20 BP; 12 A; 3 C; 2 G; 3 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 1776 TTTTGTGAACCCCATCTTT 1795  
Db 20 TTTTGTGAACGTCATGTTT 1  
  
RESULT 5039  
ABT07437/c  
ID ABT07437 standard; DNA; 20 BP.  
XX  
AC ABT07437;  
XX  
DT 14-NOV-2002 (first entry)  
XX  
DE Mammalian protein phosphatase 2 oligo inhibitor SEQ ID No 51.  
XX  
XX Cytostatic; antidiabetic; antisense therapy; aberrant insulin regulation;  
KW protein phosphatase 2 catalytic beta subunit; antisense compound; cancer;  
KW hyperproliferative disorder; diabetes; inflammation; tumour; mammalian;  
KW ds.  
XX  
XX Mammalia.  
OS  
XX  
XX WO200264737-A2.  
PN  
XX  
PD 22-AUG-2002.  
XX

PF 31-JAN-2002; 2002WO-US002805.  
XX  
XX 09-FEB-2001; 2001US-00780045.  
PR  
XX  
XX (ISIS-) ISIS PHARM INC.  
PA  
XX  
XX Monia BP, Wyatt JR;  
PI  
XX  
XX WPI; 2002-657588/70.  
DR  
XX  
XX New antisense oligonucleotides targeted to nucleic acid encoding Protein  
PT Phosphatase 2 catalytic subunit beta, useful for treating diseases  
PT related to Protein Phosphatase 2 catalytic subunit beta expression, such  
PT as cancer.  
XX  
XX Claim 3; Page 95; 137pp; English.  
PS  
XX  
XX The invention relates to a novel compound 8-50 nucleotides in length  
CC targeted to a nucleic acid molecule encoding a protein phosphatase 2  
CC catalytic beta subunit, where the compound specifically hybridises with  
CC and inhibits the expression of protein phosphatase 2 catalytic beta  
CC subunits, or specifically hybridises with at least an 8-nucleotide  
CC portion of an active site on a nucleic acid molecule encoding a protein  
CC phosphatase 2 catalytic beta subunit. The antisense compounds are useful  
CC for modulating the expression of protein phosphatase 2 catalytic beta  
CC subunits and for treating diseases or conditions associated with  
CC expression of protein phosphatase 2 catalytic beta subunits, e.g.  
CC aberrant insulin regulation or diabetes or a hyperproliferative disorder,  
CC particularly cancer. The antisense compounds are also useful for  
CC diagnostics, therapeutics, prophylaxis, e.g. to prevent or delay  
CC infection, inflammation or tumour formation, as research reagents and  
CC kits, and in distinguishing between functions of various members of a  
CC biological pathway. This polynucleotide sequence represents an  
CC oligonucleotide inhibitor of mammalian protein phosphatase 2 catalytic  
CC beta subunit mRNA levels of the invention. NOTE: This oligonucleotide  
CC contains phosphorothioate residues and has 2' - MOE wings with a deoxy gap  
XX  
SQ Sequence 20 BP; 7 A; 5 C; 3 G; 5 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 1070 CTGACATCCTTAGTAGAAGG 1089  
Db 20 CTTACAGCTTTAGTAGATGG 1  
  
RESULT 5040  
ABT07470/c  
ID ABT07470 standard; DNA; 20 BP.  
XX  
XX  
AC ABT07470;  
XX  
DT 14-NOV-2002 (first entry)  
XX  
XX Human protein phosphatase 2 oligo inhibitor SEQ ID No 84.  
DE  
XX  
XX Cytostatic; antidiabetic; antisense therapy; aberrant insulin regulation;  
KW protein phosphatase 2 catalytic beta subunit; antisense compound; cancer;  
KW hyperproliferative disorder; diabetes; inflammation; tumour; human; ds.  
XX  
XX Homo sapiens.  
OS  
XX  
XX WO200264737-A2.  
PN  
XX  
XX 22-AUG-2002.  
PD  
XX  
XX 31-JAN-2002; 2002WO-US002805.  
PF  
XX  
XX 09-FEB-2001; 2001US-00780045.  
PR  
XX  
XX (ISIS-) ISIS PHARM INC.  
PA





XX The present invention relates to methods for treating or preventing  
CC cancer, involving administering to a subject having or at risk of  
CC developing cancer immunostimulatory nucleic acids that induce expression  
CC of cell surface antigens and antibodies. The methods are useful for  
CC treating or preventing cancer such as basal cell carcinoma, bladder  
CC cancer, bone cancer, brain and central nervous system (CNS) cancer,  
CC breast cancer, cervical cancer, colon and rectum cancer, connective  
CC tissue cancer, oesophageal cancer, eye cancer, kidney cancer, larynx  
CC cancer, leukaemia, liver cancer, lung cancer, Hodgkin's lymphoma, non-  
CC Hodgkin's lymphoma, melanoma, myeloma, oral cavity cancer, ovarian  
CC cancer, pancreatic cancer, prostate cancer, rhabdomyosarcoma, skin  
CC cancer, stomach cancer, testicular cancer, and uterine cancer. The  
CC present sequence is an immunostimulatory oligonucleotide described in the  
CC exemplification of the invention  
XX  
SQ Sequence 20 BP; 2 A; 8 C; 2 G; 8 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 1543 AGACTAGGGAAGGACAGGA 1562  
DB 20 AGACTGAGGAAGGAAGTGA 1  
  
RESULT 5043  
ABL38654  
ID ABL38654 standard; DNA; 20 BP.  
XX  
AC ABL38654;  
XX  
DT 16-APR-2002 (first entry)  
XX  
DE Immunostimulatory nucleic acid SEQ ID NO: 9.  
XX  
KW Antibody-induced cell lysis; cancer; immunostimulatory; CD20;  
KW angiogenesis; metastasis; cytostatic; ss.  
XX  
OS Synthetic.  
XX  
PN WO200197843-A2.  
XX  
PD 27-DEC-2001.  
XX  
PF 22-JUN-2001; 2001WO-US020154.  
XX  
PR 22-JUN-2000; 2000US-0213346P.  
XX  
PA (IOWA ) UNIV IOWA RES FOUND.  
XX  
PI Weiner G, Hartmann G;  
XX  
DR WPI; 2002-154611/20.  
XX  
PT Treating or preventing cancer, such as basal cell carcinoma, comprises  
PT administering immunostimulatory nucleic acids that induce expression of  
PT cell surface antigens and antibodies to a subject having or at risk of  
PT developing cancer.  
XX  
PS Disclosure; Page 97; 312pp; English.  
XX  
CC The present invention relates to methods for treating or preventing  
CC cancer, involving administering to a subject having or at risk of  
CC developing cancer immunostimulatory nucleic acids that induce expression  
CC of cell surface antigens and antibodies. The methods are useful for  
CC treating or preventing cancer such as basal cell carcinoma, bladder  
CC cancer, bone cancer, brain and central nervous system (CNS) cancer,  
CC breast cancer, cervical cancer, colon and rectum cancer, connective  
CC tissue cancer, oesophageal cancer, eye cancer, kidney cancer, larynx  
CC cancer, leukaemia, liver cancer, lung cancer, Hodgkin's lymphoma, non-  
CC Hodgkin's lymphoma, melanoma, myeloma, oral cavity cancer, ovarian

CC cancer, pancreatic cancer, prostate cancer, rhabdomyosarcoma, skin  
CC cancer, stomach cancer, testicular cancer, and uterine cancer. The  
CC present sequence is an immunostimulatory oligonucleotide described in the  
CC exemplification of the invention  
XX  
SQ Sequence 20 BP; 13 A; 2 C; 2 G; 3 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 1966 AATATTACCTTGAAAAA 1985  
DB 1 AAAATCAACGTTGAAAAA 20  
  
RESULT 5044  
ABL38650/c  
ID ABL38650 standard; DNA; 20 BP.  
XX  
AC ABL38650;  
XX  
DT 16-APR-2002 (first entry)  
XX  
DE Immunostimulatory nucleic acid SEQ ID NO: 4.  
XX  
KW Antibody-induced cell lysis; cancer; immunostimulatory; CD20;  
KW angiogenesis; metastasis; cytostatic; ss.  
XX  
OS Synthetic.  
XX  
PN WO200197843-A2.  
XX  
PD 27-DEC-2001.  
XX  
PF 22-JUN-2001; 2001WO-US020154.  
XX  
PR 22-JUN-2000; 2000US-0213346P.  
XX  
PA (IOWA ) UNIV IOWA RES FOUND.  
XX  
PI Weiner G, Hartmann G;  
XX  
DR WPI; 2002-154611/20.  
XX  
PT Treating or preventing cancer, such as basal cell carcinoma, comprises  
PT administering immunostimulatory nucleic acids that induce expression of  
PT cell surface antigens and antibodies to a subject having or at risk of  
PT developing cancer.  
XX  
PS Disclosure; Page 96; 312pp; English.  
XX  
CC The present invention relates to methods for treating or preventing  
CC cancer, involving administering to a subject having or at risk of  
CC developing cancer immunostimulatory nucleic acids that induce expression  
CC of cell surface antigens and antibodies. The methods are useful for  
CC treating or preventing cancer such as basal cell carcinoma, bladder  
CC cancer, bone cancer, brain and central nervous system (CNS) cancer,  
CC breast cancer, cervical cancer, colon and rectum cancer, connective  
CC tissue cancer, oesophageal cancer, eye cancer, kidney cancer, larynx  
CC cancer, leukaemia, liver cancer, lung cancer, Hodgkin's lymphoma, non-  
CC Hodgkin's lymphoma, melanoma, myeloma, oral cavity cancer, ovarian  
CC cancer, pancreatic cancer, prostate cancer, rhabdomyosarcoma, skin  
CC cancer, stomach cancer, testicular cancer, and uterine cancer. The  
CC present sequence is an immunostimulatory oligonucleotide described in the  
CC exemplification of the invention  
XX  
SQ Sequence 20 BP; 12 A; 3 C; 2 G; 3 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1776 TTTTGTGAACCCCATCTTT 1795  
Db ||||| ||||| ||||| |||||  
20 TTTTGTGAACGTCATGTTT 1

RESULT 5045  
ABK34037  
ID ABK34037 standard; DNA; 20 BP.  
AC ABK34037;  
XX  
DT 18-JUN-2002 (first entry)  
XX  
DE Human CSNK2B PCR primer #1.  
XX  
KW Human; ss; astrocytoma; cytostatic; staging; cysteine methylation; CpG;  
KW bisulphite; brain tissue; MALDI; ESI; electron spray mass spectrometry;  
KW matrix assisted laser desorption/ionization mass spectrometry; primer.  
XX  
OS Homo sapiens.  
XX  
PN WO200202808-A2.  
XX  
PD 10-JAN-2002.  
XX  
PF 02-JUL-2001; 2001WO-EP007538.  
XX  
PR 30-JUN-2000; 2000DE-01032529.  
PR 01-SEP-2000; 2000DE-01043826.  
XX  
PA (EPIG-) EPIGENOMICS AG.  
XX  
PI Olek A, Piepenbrock C, Berlin K;  
XX  
DR WPI; 2002-171649/22.  
XX  
PT Novel chemically modified genomic DNA sequences, useful in the  
PT characterization, classification, differentiation, grading, staging,  
PT treatment and/or diagnosis of astrocytomas or predisposition to  
PT astrocytomas.  
XX  
PS Example 4; Page 20; 37pp; English.  
XX

The invention relates to a nucleic acid comprising a sequence (I) of at least 18 bases in length of a segment of chemically pre-treated genomic DNA which has any one of the sequences of (ABK33919-ABK34032) or its complement. Also included are an oligonucleotide or peptide nucleic acid (or set thereof) of at least 9 nucleotides which hybridises to (I), primers for (I), probes for detecting cytosine methylation or single-nucleotide polymorphisms (SNP) in (I), an array of oligomers or peptide nucleic acids for analysing diseases associated with the methylation states of the CpG dinucleotides of (I). The array is useful for determining genetic and/or epigenetic parameters, classification, differentiation, grading, staging, treatment and/or diagnosis of astrocytomas, or the predisposition to astrocytomas by analysing cytosine methylations, involves obtaining a biological sample containing genomic DNA, extracting the genomic DNA, converting cytosine bases which are unmethylated at the 5-position, in the genomic DNA sample, to uracil or another base which is dissimilar to cytosine in terms of hybridisation behaviour, by chemical treatment and amplifying chemically pre-treated genomic DNA fragments using the array and a polymerase, where the amplification carries a detectable label. The method further involves identifying methylation status of one or more cytosine positions, and analysing methylation status of the cytosine positions by reference to one or more data sets. The genomic DNA is chemically treated by using a bisulphite, hydrogen sulphite or disulphite. The amplification step amplifies DNA which is of particular interest in astrocytoma or brain tissues, based on the specific genomic methylation status of brain tissues, as opposed to background DNA. The amplification carries a fluorescent label or radionuclide. Optionally, the labels of the amplification are detachable molecule fragments having a typical mass which are detected in a mass spectrometer. The fragments of chemically pre-treated genomic DNA to be amplified, have a single positive or

CC negative charge for a better detectability in the mass spectrometer.  
CC Preferably, the amplicates or fragments of the amplicates are  
CC detected by matrix assisted laser desorption/ionization mass spectrometry  
CC (MALDI) or using electron spray mass spectrometry (ESI). The present  
CC sequence is a PCR primer used to amplify a region containing a methylated  
CC cytosine from one of the chemically pre-treated reference DNA samples of  
CC the invention. Note: The sequence data for this patent did not form part  
CC of the printed specification, but was obtained in electronic format  
CC directly from WIPO at ftp.wipo.int/pub/published\_pct\_sequences  
XX

SQ Sequence 20 BP; 8 A; 0 C; 9 G; 3 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 2683 GGTGAAATGGAGATTGGAA 2702  
Db ||||| ||||| ||||| |||||  
1 GGGGAAATGGAGAGTGTAA 20

RESULT 5046  
ABK67993

ID ABK67993 standard; DNA; 20 BP.

AC ABK67993;

DT 02-JUL-2002 (first entry)

DE Mutant DNA library PCR primer #43.

KW Mutant DNA library; unit domain; clone; protein library; mutant protein;  
KW selective splicing; molecular engineering; DNA shuffling; evolution; PCR;  
KW primer; ss.

OS Synthetic.

PN WO200226964-A1.

PD 04-APR-2002.

PF 26-SEP-2001; 2001WO-JP008387.

PR 27-SEP-2000; 2000JP-00293692.

PR 06-FEB-2001; 2001JP-00029138.

PA (MITU ) MITSUBISHI CHEM CORP.

PI Tsuji T, Yanagawa H;

DR WPI; 2002-340012/37.

XX Constructing mutant DNA library comprises ligating unit domain DNAs in  
XX arbitrary combinations before mixing in specific manner as template for  
XX polymerase chain reaction to give clones, useful in producing protein  
XX library.

PS Example 2; Page 80; 89pp; Japanese.

XX The present invention relates to a new method of constructing a mutant  
XX DNA library. The method of the invention involves ligating unit domain  
XX DNAs in arbitrary combinations, mixing the ligated unit domains and  
XX performing polymerase chain reaction (PCR) by employing the ligated unit  
XX domain DNA mixture as a template to obtain a DNA library containing 2 or  
XX more clones. The method can be used for constructing a mutant DNA library  
XX which is for use in producing e.g. protein library, mutant proteins and  
XX artificial amino acid sequences with desirable functional properties with  
XX a combination of unit domains. The method can also be used for  
XX selectively splicing a library to yield mutant proteins with retention of  
XX function and smaller for wider application and in evolution molecular  
XX engineering in which the constructed mutant DNA library contains various  
XX DNA sequence including original sequences, exons and expression-  
XX regulating domains in structural DNAs. The method is easy and less error

CC prone in DNA shuffling when constructing DNAs. The present nucleic acid  
CC sequence represent one of a collection (ABK67951-ABK68000) of PCR primers  
CC that were used in the methods of the invention for construction of a  
CC mutant DNA library, as describe above

XX Sequence 20 BP; 2 A; 9 C; 3 G; 6 T; 0 U; 0 Other;  
SQ Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 596 CGCGCTCCGACCTGCTGCT 615  
Db 1 CCCCTCTATGACCTGCTGCT 20

RESULT 5047  
ABK85201/c  
ID ABK85201 standard; DNA; 20 BP.  
XX  
AC ABK85201;  
XX  
DT 13-AUG-2002 (first entry)  
XX Rat PTPB1 antisense oligonucleotide ISIS. 106409.  
DE  
XX Antisense; protein phosphatase 1B; PTP1B; ss; probe; rat;  
KW type 2 diabetes; obesity; ovarian cancer; chronic myeloid leukaemia;  
KW hyperproliferative disease; antidiabetic; anorectic; cytostatic;  
KW blood glucose; gene therapy.

XX Rattus norvegicus.  
OS  
XX US2002055479-A1.  
PN  
XX 09-MAY-2002.  
PD  
XX 14-MAY-2001; 2001US-00854883.  
PF  
XX 18-JAN-2000; 2000US-00487368.  
PR  
XX 31-JUL-2000; 2000US-00629644.  
XX  
XX (COWS/) COWSERT L M.  
PA (WYAT/) WYATT J.  
PA (FREI/) FREIER S M.  
PA (MONI/) MONIA B P.  
PA (BUTL/) BUTLER M M.  
PA (MCKA/) MCKAY R.

XX Cowsert LM, Wyatt J, Freier SM, Monia BP, Butler MM, Mckay R;  
PI  
XX WPI; 2002-462914/49.  
DR  
XX Compound for inhibiting the expression of protein phosphatase 1B (PTP1B)  
PT and for treating diabetes, cancer, or obesity, comprises an antisense  
PT oligonucleotide targeted to nucleic acid encoding PTP1B.

XX Claim 3; Page 24; 133pp; English.  
XX  
XX The invention relates to a compound of 8-50 nucleobases in length  
CC targeted to a nucleic acid encoding protein phosphatase 1B (PTP1B), where  
CC the compound specifically hybridises with and inhibits the expression of  
CC PTP1B (e.g. an antisense oligonucleotide). Also included are (1) a  
CC compound of 8-50 nucleobases in length which specifically hybridises with  
CC an 8 nucleobase portion of an active site on a nucleic acid encoding  
CC PTP1B; (2) inhibiting the expression of PTP1B in cells or tissues  
CC comprising contacting the cells or tissues with the compound; treating an  
CC animal having or suspected of having a disease or condition associated  
CC with PTP1B comprising administering the compound; (4) decreasing blood  
CC sugar levels in an animal comprising administering the compound; (5)  
CC preventing or delaying the onset of a disease or condition associated  
CC with PTP1B in an animal comprising administering the compound; and (6)  
CC preventing or delaying the onset of an increase in blood glucose levels

CC in an animal comprising administering the compound. The compound is used  
CC to inhibit the expression of PTP1B in cells or tissues, to treat or  
CC prevent or delay the onset of a disease or condition associated with  
CC PTP1B, such as type 2 diabetes, obesity, cancer (especially ovarian  
CC cancer, chronic myeloid leukaemia and hyperproliferative diseases in an  
CC animal having or suspected of having the disease or condition, and for  
CC decreasing blood sugar levels or preventing or delaying the onset of an  
CC increase in blood glucose levels in an animal. The compound is also used  
CC in diagnostics, therapeutics, prophylaxis, and in research reagents and  
CC kits. The present sequence is an antisense compound of the invention  
CC targetting rat PTP1B

XX Sequence 20 BP; 5 A; 5 C; 7 G; 3 T; 0 U; 0 Other;  
SQ Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1590 ACTGGGAACCCCTCCTGGCC 1609  
Db 20 ACTGGGAAGCCCTTCTGGTC 1

RESULT 5048  
ABK85319  
ID ABK85319 standard; DNA; 20 BP.  
XX  
AC ABK85319;  
XX  
DT 13-AUG-2002 (first entry)  
XX  
DE Human PTP1B antisense oligonucleotide ISIS 142072.  
XX  
KW Antisense; protein phosphatase 1B; PTP1B; ss; probe; human;  
KW type 2 diabetes; obesity; ovarian cancer; chronic myeloid leukaemia;  
KW hyperproliferative disease; antidiabetic; anorectic; cytostatic;  
KW blood glucose; gene therapy.

XX Homo sapiens.  
OS  
XX US2002055479-A1.  
PN  
XX 09-MAY-2002.  
PD  
XX 14-MAY-2001; 2001US-00854883.  
PF  
XX 18-JAN-2000; 2000US-00487368.  
PR  
XX 31-JUL-2000; 2000US-00629644.  
XX  
XX (COWS/) COWSERT L M.  
PA (WYAT/) WYATT J.  
PA (FREI/) FREIER S M.  
PA (MONI/) MONIA B P.  
PA (BUTL/) BUTLER M M.  
PA (MCKA/) MCKAY R.

XX Cowsert LM, Wyatt J, Freier SM, Monia BP, Butler MM, Mckay R;  
PI  
XX WPI; 2002-462914/49.  
DR  
XX Compound for inhibiting the expression of protein phosphatase 1B (PTP1B)  
PT and for treating diabetes, cancer, or obesity, comprises an antisense  
PT oligonucleotide targeted to nucleic acid encoding PTP1B.

XX Example 22; Page 28; 133pp; English.  
XX  
XX The invention relates to a compound of 8-50 nucleobases in length  
CC targeted to a nucleic acid encoding protein phosphatase 1B (PTP1B), where  
CC the compound specifically hybridises with and inhibits the expression of  
CC PTP1B (e.g. an antisense oligonucleotide). Also included are (1) a  
CC compound of 8-50 nucleobases in length which specifically hybridises with  
CC an 8 nucleobase portion of an active site on a nucleic acid encoding  
CC PTP1B; (2) inhibiting the expression of PTP1B in cells or tissues



comprising contacting the cells or tissues with the compound; treating an animal having or suspected of having a disease or condition associated with PTP1B comprising administering the compound; (4) decreasing blood sugar levels in an animal comprising administering the compound; (5) preventing or delaying the onset of a disease or condition associated with PTP1B in an animal comprising administering the compound; and (6) preventing or delaying the onset of an increase in blood glucose levels in an animal comprising administering the compound. The compound is used to inhibit the expression of PTP1B in cells or tissues, to treat or prevent or delay the onset of a disease or condition associated with PTP1B, such as type 2 diabetes, obesity, cancer (especially ovarian cancer, chronic myeloid leukaemia and hyperproliferative diseases in an animal having or suspected of having the disease or condition, and for decreasing blood sugar levels or preventing or delaying the onset of an increase in blood glucose levels in an animal. The compound is also used in diagnostics, therapeutics, prophylaxis, and in research reagents and kits. The present sequence is an antisense compound of the invention targetting human PTP1B

Sequence 20 BP; 5 A; 8 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 350 CCTCCTTACCAGCAGCTGGC 369

Db 1 CCTCCTTACCAGCAGAGGC 20

RESULT 5049

ABK85041/C

ID ABK85041 standard; DNA; 20 BP.

AC ABK85041;

DT 13-AUG-2002 (first entry)

DE Human PTP1B antisense oligonucleotide ISIS 107775.

Antisense; protein phosphatase 1B; PTP1B; ss; probe; human; type 2 diabetes; obesity; ovarian cancer; chronic myeloid leukaemia; hyperproliferative disease; antidiabetic; anorectic; cytostatic; blood glucose; gene therapy.

OS Homo sapiens.

PN US2002055479-A1.

PD 09-MAY-2002.

PF 14-MAY-2001; 2001US-00854883.

PR 18-JAN-2000; 2000US-00487368.

XX 31-JUL-2000; 2000US-00629644.

PA (COWS/) COWSERT L M.

PA (WYAT/) WYATT J.

PA (FREI/) FREIER S M.

PA (MONI/) MONIA B P.

PA (BUTL/) BUTLER M M.

PA (MCKA/) MCKAY R.

PI Cowsert LM, Wyatt J, Freier SM, Monia BP, Butler MM, Mckay R;

XX WPI; 2002-462914/49.

DR Compound for inhibiting the expression of protein phosphatase 1B (PTP1B) and for treating diabetes, cancer, or obesity, comprises an antisense oligonucleotide targeted to nucleic acid encoding PTP1B.

XX Claim 3; Page 23; 133pp; English.

The invention relates to a compound of 8-50 nucleobases in length targeted to a nucleic acid encoding protein phosphatase 1B (PTP1B), where the compound specifically hybridises with and inhibits the expression of PTP1B (e.g. an antisense oligonucleotide). Also included are (1) a compound of 8-50 nucleobases in length which specifically hybridises with an 8 nucleobase portion of an active site on a nucleic acid encoding PTP1B; (2) inhibiting the expression of PTP1B in cells or tissues comprising contacting the cells or tissues with the compound; treating an animal having or suspected of having a disease or condition associated with PTP1B comprising administering the compound; (4) decreasing blood sugar levels in an animal comprising administering the compound; (5) preventing or delaying the onset of a disease or condition associated with PTP1B in an animal comprising administering the compound; and (6) preventing or delaying the onset of an increase in blood glucose levels in an animal comprising administering the compound. The compound is used to inhibit the expression of PTP1B in cells or tissues, to treat or prevent or delay the onset of a disease or condition associated with PTP1B, such as type 2 diabetes, obesity, cancer (especially ovarian cancer, chronic myeloid leukaemia and hyperproliferative diseases in an animal having or suspected of having the disease or condition, and for decreasing blood sugar levels or preventing or delaying the onset of an increase in blood glucose levels in an animal. The compound is also used in diagnostics, therapeutics, prophylaxis, and in research reagents and kits. The present sequence is an antisense compound of the invention targetting human PTP1B

SQ Sequence 20 BP; 3 A; 6 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 903 AAGTACAGAGCGGACTGTCC 922

Db 20 AGGTACAGAGACGTCAGTCC 1

RESULT 5050

AAD40692

ID AAD40692 standard; DNA; 20 BP.

XX AAD40692;

AC AAD40692;

DT 30-OCT-2002 (first entry)

DE Human hepsin antisense oligonucleotide, ISIS 107148.

Antisense; hepsin; inflammation; tumour; gene therapy; cytostatic; phosphorothioate backbone; ss.

OS Homo sapiens.

PN Synthetic.

Key Location/Qualifiers

modified\_base 1..20

FT /\*tag= a

FT /mod\_base= OTHER

FT /note= "Phosphorothioate backbone"

modified\_base 1..5

FT /\*tag= b

FT /mod\_base= OTHER

FT /note= "2'methoxyethyl nucleotides"

modified\_base 2

FT /\*tag= d

FT /mod\_base= m5c

modified\_base 3

FT /\*tag= e

FT /mod\_base= m5c

modified\_base 6

FT /\*tag= f

FT /mod\_base= m5c

modified\_base 16..20

FT /\*tag= c



PR	20-OCT-2000; 2000US-00692414.
PR	24-JAN-2001; 2001US-00768184.
XX	
PA	(PEKE ) PE CORP NY.
XX	
PI	Kalush F, Cassel MJ, Hwang SS, Winn-Deen ES;
XX	
DR	WPI; 2002-041152/05.
XX	
PT	Novel variant of estrogen receptor alpha polypeptide useful for
PT	determining the biological activity of a protein for high throughput
PT	screening and for raising antibodies that elicit an immune response in
PT	host.
XX	
PS	Example; Page 56; 333pp; English.
XX	
CC	The present invention describes an isolated peptide (I) consisting of an
CC	amino acid sequence selected from: (a) the amino acid sequence of a
CC	variant of the oestrogen receptor alpha (ESR-alpha) protein in AAG68251;
CC	or (b) a fragment comprising at least 10 contiguous amino acids of the
CC	protein in AAG68251. (I) has cytostatic, osteopathic, cardiant and
CC	vasotropic activities, and can be used in gene therapy and vaccine
CC	production. (I) is useful for identifying an agent that binds to (I), by
CC	contacting (I) with an agent and assaying the contacted mixture to
CC	determine whether a complex is formed with the agent bound to the
CC	peptide. A polynucleotide (II), encoding (I), is useful in the
CC	development of diagnostics and therapies for diseases and disorders
CC	mediated/modulated by an oestrogen receptor (ER). (II) is also useful in
CC	gene therapy for treating cancer, osteoporosis and cardiovascular
CC	diseases. The human ESR-alpha gene is located on chromosome 6. ABA89779
CC	to ABA89828 represent oligonucleotides covering human ER exon-intron
CC	boundaries, and ABA89829 to ABA89868 represent oligonucleotides covering
CC	human synaptic nuclei expressed gene 2 exon-intron boundaries, which are
CC	used in an example from the present invention.
XX	
SQ	Sequence 20 BP; 15 A; 1 C; 4 G; 0 T; 0 U; 0 Other;
	Query Match 0.5%; Score 13.6; DB 1; Length 20;
	Best Local Similarity 80.0%; Pred. No. 4.5e+03;
	Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps
QY	2155 TTTTCTCCTTTTGT 2174
Db	20 TTTCTTCTCCTTTTGT 1
	RESULT 5052
	ABN79650
ID	ABN79650 standard; DNA; 20 BP.
XX	
AC	ABN79650;
XX	
DT	29-JUL-2002 (first entry)
XX	
DE	Mouse Fas chimeric phosphorothioate oligonucleotide #1.
XX	
KW	Mouse; immunosuppressive; antiinflammatory; hepatotropic; cytostatic;
KW	vasotropic; hepatitis; cancer; allograft rejection; ds; Fas.
XX	
OS	Mus sp.
XX	
PN	US2002004490-A1.
XX	
PD	10-JAN-2002.
XX	
PF	09-MAR-2001; 2001US-00802669.
XX	
PR	12-APR-1999; 99US-00290640.
PR	18-SEP-2000; 2000US-00665615.
XX	
PA	(DEAN/) DEAN N M.
PA	(MARC/) MARCUSON E G.
PA	(WYAT/) WYATT J.

PA (ZHAN/) ZHANG H.  
XX Dean NM, Marcussun EG, Wyatt J, Zhang H;  
PI  
XX WPI; 2002-204886/26.  
DR  
XX Novel antisense compound targeted to nucleic acid encoding Fas, Fas  
PT ligand or Fas associated protein-1 is useful for inhibiting expression of  
PT Fas, Fas ligand, or Fap-1 in cells or tissues, and for treating  
PT hepatitis.  
XX  
PS Claim 3; Page 17; 84pp; English.  
XX  
CC This invention relates to an antisense compound encoding Fas, Fas ligand,  
CC or Fas associated protein-1 (Fap-1). The inhibition of Fas mediated  
CC signalling is thought to be immunosuppressive, antiinflammatory,  
CC hepatotropic, cytostatic and vasotropic. Antisense oligonucleotides were  
CC designed to target human Fas. Oligonucleotides were synthesised as  
CC chimeric oligonucleotides and are useful for treating an animal having an  
CC autoimmune or inflammatory disease e.g., hepatitis, cancer, a condition  
CC associated with apoptosis, allograft rejection, or ischemia reperfusion  
CC injury. Optionally, the above mentioned conditions are prevented by  
CC contacting the allograft with the antisense oligonucleotide. The  
CC oligonucleotides are used in diagnostics, therapeutics, prophylaxis and  
CC as research reagents and in kits. The oligonucleotides are also useful  
CC for research purposes. The present nucleotide sequence is related to  
CC mouse Fas  
XX  
SQ Sequence 20 BP; 8 A; 4 C; 8 G; 0 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 231 GCAGCAATGGGAATCCGCGG 250  
Db 1 GCAGCAAGGGAACACGCGG 20  
  
RESULT 5053  
ABS54903/C  
ID ABS54903 standard; DNA; 20 BP.  
XX  
AC ABS54903;  
XX  
DT 03-DEC-2002 (first entry)  
XX  
DE Bovine breed discrimination method PCR primer #3.  
XX  
KW Bovine; breed discrimination; cow; domestic origin beef; primer;  
KW foreign origin beef; single nucleotide polymorphism; SNP; PCR; ss.  
XX  
OS Bos taurus.  
XX  
PN JP2002209581-A.  
XX  
PD 30-JUL-2002.  
XX  
PF 12-JAN-2001; 2001JP-00005368.  
XX  
PR 12-JAN-2001; 2001JP-00005368.  
XX  
PA (BMLB-) BML KK.  
PA (NISH-) ZH NIPPON SHOKUNIKU SHOHI SOGO CENT.  
XX  
DR WPI; 2002-670037/72.  
XX  
PT A bovine breed discrimination method from beef sample with single  
PT nucleotide polymorphisms (SNP) of Japanese Black and Holstein Friesian  
PT cattle.  
XX  
PS Disclosure; Page 10; 15pp; Japanese.  
XX

CC The present invention relates to a new method for discrimination of  
CC domestic and foreign origin beef with single nucleotide polymorphisms  
CC (SNP). The invention is useful for discrimination of domestic and foreign  
CC origin beef with SNP. The method of the invention is advantageous as it  
CC allows effective discrimination of beef with SNP. The present nucleic  
CC acid sequence represents a PCR primer that was used in the method of the  
CC invention  
XX  
SQ Sequence 20 BP; 5 A; 3 C; 7 G; 5 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 778 TCTGAACCTCCCTGTCAGA 797  
Db 20 TCTGCAACTCCCTGACAGA 1  
  
RESULT 5054  
ABL43506  
ID ABL43506 standard; DNA; 20 BP.  
XX  
AC ABL43506;  
XX  
DT 11-APR-2002 (first entry)  
XX  
DE Human chromosome lp36-35 PCR primer SEQ ID NO:550.  
XX  
KW Human; chromosome lp36-35; chromosome 21q22.1; genetic analysis; genome;  
KW PCR primer; ss.  
XX  
OS Homo sapiens.  
XX  
PN JP2001321190-A.  
XX  
PD 20-NOV-2001.  
XX  
PF 12-MAR-2001; 2001JP-00068285.  
XX  
PR 10-MAR-2000; 2000JP-00066716.  
XX  
PA (RIKA ) RIKAGAKU KENKYUSHO.  
PA (GENO-) GENOTEX YG.  
XX  
DR WPI; 2002-144136/19.  
XX  
PT Arraying genome clones.  
XX  
PS Claim 4; Page 15; 528pp; Japanese.  
XX  
CC The present invention describes a method of arraying genome clones. The  
CC method comprises: (a) clones of the genomic libraries contained in  
CC multiwell plates numbered for discrimination are mixed in each of the  
CC multiwell plates; (b) a primer designed based on the chromosome marker  
CC sequence is added to the mixture to carry out an amplification reaction;  
CC (c) a signal corresponding to the marker is detected from the resultant  
CC amplified product to specify the discrimination Nos. of the multiwell  
CC plates containing the clones having said marker sequence; (d) the order  
CC of the markers is changed so that the same discrimination Nos. succeed to  
CC the maximum in the specified discrimination Nos. to array the multiwell  
CC plates; (e) the clones in the multiwell plates of the specified  
CC discrimination Nos. are mixed respectively in each wells of longitudinal  
CC and lateral directions; (f) the mixed clones are cultured and the  
CC resultant cultures are amplified by using the above primer; (g) signals  
CC are detected from the amplified products; (h) the clones in the multiwell  
CC plates are specified from the detected result; and (i) the clones are  
CC reconstructed as the positions on the chromosome and arrayed. The  
CC microarray is useful for gene analysis. ABL42957 to ABL45322 represent  
CC PCR primers for human chromosome lp36-35 DNA, and ABL45323 to ABL45634  
CC represent PCR primers for human chromosome 21q22.1, which are  
CC specifically claimed for use in the present invention  
XX

SQ Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 20 TGTCCAGTGACCCGGACAGC 39  
|||||  
Db 1 TGTCTGTGACCCCTGACTGC 20  
RESULT 5055  
ABL43971/c  
ID ABL43971 standard; DNA; 20 BP.  
XX  
AC ABL43971;  
XX  
DT 11-APR-2002 (first entry)  
XX  
DE Human chromosome 1p36-35 PCR primer SEQ ID NO:1015.  
XX  
KW Human; chromosome 1p36-35; chromosome 21q22.1; genetic analysis; genome;  
KW PCR primer; ss.  
XX  
OS Homo sapiens.  
XX  
PN JP2001321190-A.  
XX  
PD 20-NOV-2001.  
XX  
PF 12-MAR-2001; 2001JP-00068285.  
XX  
PR 10-MAR-2000; 2000JP-00066716.  
XX  
PA (RIKA ) RIKAGAKU KENKYUSHO.  
PA (GENO-) GENOTEX YG.  
XX  
DR WPI; 2002-144136/19.  
XX  
PT Arraying genome clones.  
XX  
PS Claim 4; Page 25; 528pp; Japanese.  
XX  
CC The present invention describes a method of arraying genome clones. The method comprises: (a) clones of the genomic libraries contained in multiwell plates numbered for discrimination are mixed in each of the multiwell plates; (b) a primer designed based on the chromosome marker sequence is added to the mixture to carry out an amplification reaction; (c) a signal corresponding to the marker is detected from the resultant amplified product to specify the discrimination Nos. of the multiwell plates containing the clones having said marker sequence; (d) the order of the markers is changed so that the same discrimination Nos. succeed to the maximum in the specified discrimination Nos. to array the multiwell plates; (e) the clones in the multiwell plates of the specified discrimination Nos. are mixed respectively in each wells of longitudinal and lateral directions; (f) the mixed clones are cultured and the resultant cultures are amplified by using the above primer; (g) signals are detected from the amplified products; (h) the clones in the multiwell plates are specified from the detected result; and (i) the clones are reconstituted as the positions on the chromosome and arrayed. The microarray is useful for gene analysis. ABL42957 to ABL45322 represent PCR primers for human chromosome 1p36-35 DNA, and ABL45323 to ABL45634 represent PCR primers for human chromosome 21q22.1, which are specifically claimed for use in the present invention  
SQ Sequence 20 BP; 5 A; 4 C; 6 G; 5 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 2423 ATACTGGTGCACTTCTTACG 2442  
|||||

Db 20 ATACTGGAGCATTTCCACG 1  
RESULT 5056  
ABL43508  
ID ABL43508 standard; DNA; 20 BP.  
XX  
AC ABL43508;  
XX  
DT 11-APR-2002 (first entry)  
XX  
DE Human chromosome 1p36-35 PCR primer SEQ ID NO:552.  
XX  
KW Human; chromosome 1p36-35; chromosome 21q22.1; genetic analysis; genome;  
KW PCR primer; ss.  
XX  
OS Homo sapiens.  
XX  
PN JP2001321190-A.  
XX  
PD 20-NOV-2001.  
XX  
PF 12-MAR-2001; 2001JP-00068285.  
XX  
PR 10-MAR-2000; 2000JP-00066716.  
XX  
PA (RIKA ) RIKAGAKU KENKYUSHO.  
PA (GENO-) GENOTEX YG.  
XX  
DR WPI; 2002-144136/19.  
XX  
PT Arraying genome clones.  
XX  
PS Claim 4; Page 15; 528pp; Japanese.  
XX  
CC The present invention describes a method of arraying genome clones. The method comprises: (a) clones of the genomic libraries contained in multiwell plates numbered for discrimination are mixed in each of the multiwell plates; (b) a primer designed based on the chromosome marker sequence is added to the mixture to carry out an amplification reaction; (c) a signal corresponding to the marker is detected from the resultant amplified product to specify the discrimination Nos. of the multiwell plates containing the clones having said marker sequence; (d) the order of the markers is changed so that the same discrimination Nos. succeed to the maximum in the specified discrimination Nos. to array the multiwell plates; (e) the clones in the multiwell plates of the specified discrimination Nos. are mixed respectively in each wells of longitudinal and lateral directions; (f) the mixed clones are cultured and the resultant cultures are amplified by using the above primer; (g) signals are detected from the amplified products; (h) the clones in the multiwell plates are specified from the detected result; and (i) the clones are reconstituted as the positions on the chromosome and arrayed. The microarray is useful for gene analysis. ABL42957 to ABL45322 represent PCR primers for human chromosome 1p36-35 DNA, and ABL45323 to ABL45634 represent PCR primers for human chromosome 21q22.1, which are specifically claimed for use in the present invention  
SQ Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 20 TGTCCAGTGACCCGGACAGC 39  
|||||  
Db 1 TGTCTGTGACCCCTGACTGC 20  
RESULT 5057  
ABA98707  
ID ABA98707 standard; DNA; 20 BP.  
XX  
AC ABA98707;

XX 13-MAY-2002 (first entry)  
DT PCR primer R1.  
DE  
XX  
KW FRET; nucleic acid amplification; PCR primer;  
KW fluorescence resonance energy transfer; disease diagnosis;  
KW food-borne pathogen detection; microbial detection;  
KW allelic discrimination; genotyping; gene expression analysis; ss.  
XX  
OS Synthetic.  
XX  
XX WO200194638-A2.  
PN  
XX  
PD 13-DEC-2001.  
XX  
XX 06-JUN-2001; 2001WO-US018464.  
PF  
XX  
PR 06-JUN-2000; 2000US-0209883P.  
PR 05-JUN-2001; 2001US-00875211.  
XX  
PA (APPL-) APPLERA CORP.  
XX  
PI Chen C, Egholm M, Haff L;  
XX  
XX WPI; 2002-216734/27.  
XX  
PT Novel asynchronous thermal cycling method for amplification of target  
PT nucleic acid, involves two annealing and two extension steps employing  
PT two primers which differ in their thermal melting temperatures.  
XX  
PS Example 3; Page 37; 87pp; English.  
XX  
CC The present invention relates to a method for amplifying nucleic acid.  
CC The method comprises annealing a primer (P1) to first strand (S1) of  
CC denatured target nucleic acid (dNA) at annealing temperature (T1);  
CC extending P1 at T1 or extension temperature (E1) to generate double-  
CC stranded (ds) nucleic acid; annealing primer (P2) to second strand (S2)  
CC of dNA at annealing temperature (T2); extending P2 to generate dsNA;  
CC denaturing target dsNA into S1 and S2. A probe hybridisation step may be  
CC incorporated into the cycle. A detectable probe is annealed to S2 of  
CC denatured target nucleic acid at a probe hybridisation temperature. The  
CC method is useful for amplifying target nucleic acid, preferably a  
CC plasmid, cDNA, amplicon, genomic DNA, restriction digest or a ligation  
CC product, or a target comprising single nucleotide polymorphisms. The  
CC asynchronous PCR cycle has utility in nuclease cleavage assay with a  
CC cleaving DNA fluorescence resonance energy transfer (FRET) probe, in  
CC assays for human disease diagnosis, food-borne pathogen detection and  
CC microbial detection, for allelic discrimination of target DNA, and in  
CC genotyping and gene expression analysis. The present sequence is a PCR  
CC primer, which was used to illustrate the method of the invention  
XX  
SQ Sequence 20 BP; 0 A; 9 C; 4 G; 7 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 247 GCGGGTCCCCCACCCTCTCTCT 266  
Db 1 GCTGGTCCCCCGTCTTCTCTCT 20  
  
RESULT 5058  
ABV72239  
ID ABV72239 standard; DNA; 20 BP.  
XX  
AC ABV72239;  
XX  
DT 05-DEC-2002 (first entry)  
XX  
DE Antisense oligonucleotide targeting human IGF-II mRNA.  
XX

KW Antisense oligonucleotide; insulin-like growth factor II; IGF-II;  
KW tumour growth; proliferative disorder; cancer; psoriasis;  
KW atherosclerosis; ss.  
XX  
OS Homo sapiens.  
XX  
PN US6417169-B1.  
XX  
PD 09-JUL-2002.  
XX  
PF 22-APR-1999; 99US-002955593.  
XX  
PR 23-APR-1998; 98US-0082791P.  
XX  
PA (GENE-) GENESENSE TECHNOLOGIES INC.  
XX  
PI Wright JA, Young AH, Lee YS;  
XX  
XX WPI; 2002-634739/68.  
XX  
PT Novel antisense compounds targeted to insulin-like growth factor mRNA,  
PT useful for inhibiting tumor growth and metastasis in mammals.  
XX  
PS Claim 16; Col 11; 40pp; English.  
XX  
CC ABV72238-53 represent antisense oligonucleotides which are targeted to  
CC human insulin-like growth factor II (IGF-II) mRNA. The antisense  
CC oligonucleotides are preferably complementary to 5' untranslated region  
CC consisting of exons 4, 5 or 6 of human fetal IGF-II mRNA. The antisense  
CC oligonucleotides of the invention are useful for inhibiting the growth of  
CC human tumour, where a chemotherapeutic agent is also administered. They  
CC are also useful for treating proliferative disorders including various  
CC forms of cancers, psoriasis, and atherosclerosis, as hybridisation probes  
CC to detect the presence of IGF-II mRNA in mammalian cells, and as  
CC molecular weight markers  
XX  
SQ Sequence 20 BP; 2 A; 12 C; 4 G; 2 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 251 GTCCCCCACCCTCTCTCTCCGC 270  
Db 1 GTCCACCAGCTCCCCCGCGC 20  
  
RESULT 5059  
ABQ81884/C  
ID ABQ81884 standard; DNA; 20 BP.  
XX  
AC ABQ81884;  
XX  
DT 19-NOV-2002 (first entry)  
XX  
DE Kaposi's Sarcoma related PCR primer SEQ ID NO:34.  
XX  
KW Human; Kaposi's sarcoma; tumour; angiogenesis; PCR primer; ss.  
XX  
OS Homo sapiens.  
XX  
PN EP125233-A2.  
XX  
PD 24-JUL-2002.  
XX  
PF 23-JAN-2002; 2002EP-00075264.  
XX  
XX 23-JAN-2001; 2001EP-00200228.  
PR 28-SEP-2001; 2001EP-00203703.  
PR 28-SEP-2001; 2001US-0325722P.  
XX  
PA (AMST-) AMSTERDAM SUPPORT DIAGNOSTICS BV.  
XX



PI Van Der Kuyl AC, Cornelissen M;  
XX WPI; 2002-668396/72.  
DR  
XX  
PT Determining presence of a tumor cell or angiogenesis, and the  
PT effectiveness of treatment, by detecting the presence of marker genes is  
PT useful to detect and monitor treatment of Kaposi's Sarcoma.  
XX  
XX  
PS Example 8; Page 11; 38pp; English.  
XX  
CC The present invention describes a method for determining if an individual  
CC has a tumour cell or site of angiogenesis, or if a treatment is effective  
CC in changing angiogenesis or changing a status of a set of target cells,  
CC comprising determining if a sample of the subject has an expression  
CC product of at least one marker gene. Also described is a compound capable  
CC of altering the expression or activity of Keratin 14, TIE 1, Salicoadhesin  
CC or Siglec in a cell. Peripheral blood mononuclear cell (PBMC)-expressed  
CC Keratin 14, TIE 1, Salicoadhesin or Siglec, and kits containing them from  
CC the present invention can be used in a diagnostic method, particularly as  
CC an indicator of angiogenesis or to determine presence of a tumour cell.  
CC The method of the invention is suitable to determine within a few days if  
CC a certain treatment against Kaposi's Sarcoma is successful. ABQ81851 to  
CC ABQ82006 represent nucleotide sequence used in the exemplification of the  
CC present invention  
XX  
SQ Sequence 20 BP; 8 A; 6 C; 3 G; 3 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 2343 CCCGTGGAGGTTCTGTATT 2362  
DB 20 CCAGTGGAGGTCATGTTTT 1  
  
RESULT 5060  
ABK37370/c  
ID ABK37370 standard; DNA; 20 BP.  
XX  
AC ABK37370;  
XX  
DT 08-MAY-2002 (first entry)  
XX  
DE Rat PTP1B mRNA level inhibition antisense DNA #87.  
XX  
KW Human; mouse; rat; protein tyrosine phosphatase 1B; PTP1B; ss; adipose;  
KW liver; kidney; metabolic disease; type 2 diabetes; obesity; cancer;  
KW hyperproliferative condition; blood serum; blood plasma; antidiabetic;  
KW blood glucose level; cytostatic; anorectic; antisense gene therapy;  
KW PTP1B mRNA level inhibition.  
XX  
OS Rattus norvegicus.  
XX  
PN WO200210378-A2.  
XX  
PD 07-FEB-2002.  
XX  
PF 30-JUL-2001; 2001WO-US023874.  
XX  
PR 31-JUL-2000; 2000US-00629644.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Cowsert LM, Wyatt J, Freier SM, Monia BP, Butler MM, McKay R;  
XX WPI; 2002-180079/23.  
XX  
PT Novel antisense compound useful for treating type 2 diabetes, cancer and  
PT obesity, is targeted to nucleic acid encoding human protein phosphatase  
PT 1B, and hybridizes and inhibits PTP1B expression.  
XX  
PS Claim 3; Page 72; 142pp; English.

XX The invention relates to a compound targeted to a nucleic acid molecule  
CC encoding protein phosphatase 1B (PTP1B), which specifically hybridises  
CC with and inhibits the expression of PTP1B. The compounds of the invention  
CC are useful for inhibiting the expression of PTP1B in liver, kidney or  
CC adipose cells or tissues and for treating an animal, preferably human,  
CC having a disease or condition associated with PTP1B, including metabolic  
CC diseases or conditions, e.g. type 2 diabetes and obesity, or  
CC hyperproliferative conditions such as cancer. The sequences are also  
CC useful for decreasing blood (serum or plasma) glucose levels in an animal  
CC e.g. a diabetic human or rodent, for preventing or delaying the onset of  
CC a disease or condition associated with PTP1B, and for preventing or  
CC delaying the onset of an increase in blood glucose levels. This sequence  
CC represents a PTP1B mRNA level inhibition antisense oligonucleotide of the  
CC invention  
XX  
SQ Sequence 20 BP; 5 A; 5 C; 7 G; 3 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 1590 ACTGGGAACCCCTCCTGGCC 1609  
DB 20 ACTGGAAGCCCTTCTGGTC 1  
  
RESULT 5061  
ABK37210/c  
ID ABK37210 standard; DNA; 20 BP.  
XX  
AC ABK37210;  
XX  
DT 08-MAY-2002 (first entry)  
XX  
DE Human PTP1B mRNA level inhibition antisense DNA #7.  
XX  
KW Human; mouse; rat; protein tyrosine phosphatase 1B; PTP1B; ss; adipose;  
KW liver; kidney; metabolic disease; type 2 diabetes; obesity; cancer;  
KW hyperproliferative condition; blood serum; blood plasma; antidiabetic;  
KW blood glucose level; cytostatic; anorectic; antisense gene therapy;  
KW PTP1B mRNA level inhibition.  
XX  
OS Homo sapiens.  
XX  
PN WO200210378-A2.  
XX  
PD 07-FEB-2002.  
XX  
PF 30-JUL-2001; 2001WO-US023874.  
XX  
PR 31-JUL-2000; 2000US-00629644.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Cowsert LM, Wyatt J, Freier SM, Monia BP, Butler MM, McKay R;  
XX WPI; 2002-180079/23.  
XX  
PT Novel antisense compound useful for treating type 2 diabetes, cancer and  
PT obesity, is targeted to nucleic acid encoding human protein phosphatase  
PT 1B, and hybridizes and inhibits PTP1B expression.  
XX  
PS Claim 3; Page 67; 142pp; English.  
XX  
CC The invention relates to a compound targeted to a nucleic acid molecule  
CC encoding protein phosphatase 1B (PTP1B), which specifically hybridises  
CC with and inhibits the expression of PTP1B. The compounds of the invention  
CC are useful for inhibiting the expression of PTP1B in liver, kidney or  
CC adipose cells or tissues and for treating an animal, preferably human,  
CC having a disease or condition associated with PTP1B, including metabolic  
CC diseases or conditions, e.g. type 2 diabetes and obesity, or  
CC hyperproliferative conditions such as cancer. The sequences are also

CC useful for decreasing blood (serum or plasma) glucose levels in an animal  
CC e.g. a diabetic human or rodent, for preventing or delaying the onset of  
CC a disease or condition associated with PTP1B , and for preventing or  
CC delaying the onset of an increase in blood glucose levels. This sequence  
CC represents a PTP1B mRNA level inhibition antisense oligonucleotide of the  
CC invention  
XX  
SQ Sequence 20 BP; 3 A; 6 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 903 AAGTACAGAGCGACTGTCC 922  
Db 20 AGGTACAGAGCGTCTCAGTCC 1

RESULT 5062  
AAD35748  
ID AAD35748 standard; DNA; 20 BP.  
XX  
AC AAD35748;  
XX  
DT 26-JUL-2002 (first entry)  
XX  
DE Human hIbета4BP antisense oligonucleotide, ISIS #129469.

KW Antisense; human Integrin beta 4 binding protein; hIbета4BP; cytostatic;  
KW cell proliferation; cancer; gene therapy; phosphorothioate backbone; ss.  
XX  
OS Homo sapiens.

FH Key Location/Qualifiers  
FT modified\_base 1..20  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "Phosphorothioate backbone"  
FT modified\_base 1..5  
FT /\*tag= b  
FT /mod\_base= OTHER  
FT /note= "2'methoxyethyl nucleotides"  
FT modified\_base 1  
FT /\*tag= d  
FT /mod\_base= m5c  
FT modified\_base 4  
FT /\*tag= e  
FT /mod\_base= m5c  
FT modified\_base 5  
FT /\*tag= f  
FT /mod\_base= m5c  
FT modified\_base 8  
FT /\*tag= g  
FT /mod\_base= m5c  
FT modified\_base 12  
FT /\*tag= h  
FT /mod\_base= m5c  
FT modified\_base 14  
FT /\*tag= i  
FT /mod\_base= m5c  
FT modified\_base 15  
FT /\*tag= j  
FT /mod\_base= m5c  
FT modified\_base 16..20  
FT /\*tag= c  
FT /mod\_base= OTHER  
FT /note= "2'methoxyethyl nucleotides"  
FT modified\_base 20  
FT /\*tag= k  
FT /mod\_base= m5c

XX  
PN US6355482-B1.  
XX

PD 12-MAR-2002.  
XX  
PF 17-NOV-2000; 2000US-00716161.  
XX  
PR 17-NOV-2000; 2000US-00716161.  
XX

PA (ISIS-) ISIS PHARM INC.

PI Bennett CF, Freier SM;

XX WPI; 2002-370579/40.

PT New antisense compound targeted to a region of a nucleic acid encoding  
PT human Integrin beta 4 binding protein and that inhibits expression of the  
PT nucleic acid, for treating e.g. cancer.  
XX

PS Claim 3; Col 45-46; 40pp; English.

XX  
CC The invention relates to antisense compounds targeted to a nucleic acid  
CC encoding human Integrin beta 4 binding protein (hIbета4BP), which  
CC specifically hybridises with the nucleic acid and inhibits its  
CC expression. The antisense compounds are useful to prevent or treat  
CC diseases associated with hIbета4BP expression, particularly conditions  
CC involving aberrant or deregulated cell proliferation (e.g. cancer). The  
CC hIbета4BP polynucleotide is used in gene therapy. The present sequence is  
CC an antisense oligonucleotide targeted to hIbета4BP  
XX

SQ Sequence 20 BP; 3 A; 8 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 351 CTCCTTACCAGCAGCTGGCC 370  
Db 1 CTCCTTACTAGCACCTGGTC 20

RESULT 5063  
ABL60762

ID ABL60762 standard; DNA; 20 BP.

XX  
AC ABL60762;

XX 10-SEP-2002 (first entry)

DE Human SPHK1 cDNA cloning antisense primer hspk1-GSP3.

XX  
KW Sphingosine kinase; SPHK; SPHK1; cytostatic; vasotropic; antidiabetic;  
KW neuroprotective; human; enzyme; PCR; primer; ss.

OS Homo sapiens.

XX US2002042358-A1.

XX 11-APR-2002.

XX 02-MAR-2001; 2001US-00796487.

PR 02-MAR-2000; 2000US-0186352P.

XX (SPIE/) SPIEGEL S.

PI Spiegel S;

XX WPI; 2002-478846/51.

DR New isolated sphingosine kinase, useful in identifying modulators for  
XX treating e.g. cancer, also related nucleic acid, vectors and transformed  
XX cells.

PS Disclosure; Page 3; 24pp; English.

CC The invention relates to an isolated sphingosine kinase (SPHK) DNA. Cells  
CC transformed with SPHK DNA are used to screen for agents that reduce,  
CC eliminate or promote SPHK activity. Agents that inhibit activity are  
CC useful for decreasing cell proliferation, e.g. for treating cancer, and  
CC for treating diseases associated with abnormal migration and motility of  
CC cells, e.g. restenosis or diabetic neuropathy. Agents that increase  
CC activity are used to reduce cell death. Antibodies raised against SPHK,  
CC and primers or oligonucleotides derived from the DNA are useful for  
CC diagnosis. The antibodies are also useful as therapeutic inhibitors. The  
CC present sequence represents a PCR primer for cloning the human  
CC sphingosine kinase 1 (hSPHK1) cDNA  
XX  
SQ Sequence 20 BP; 5 A; 5 C; 9 G; 1 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 479 GGCGCCAGAGCCAGGAGG 498  
||| ||||| ||||| ||  
Db 1 GGTCGACAGCGCAGGAAG 20

RESULT 5064  
ABA97633  
ID ABA97633 standard; DNA; 20 BP.  
XX  
AC ABA97633;  
XX  
DT 11-APR-2002 (first entry)  
XX  
DE Poly o nucleotide sequence.  
XX  
KW ss; fluorochrome; nucleic acid probe; fluorescence.  
XX  
OS Unidentified.  
XX  
PN JP2001286300-A.  
XX  
PD 16-OCT-2001.

20-APR-2000; 2000JP-00120097.  
20-APR-1999; 99JP-00111601.  
24-AUG-1999; 99JP-00236666.  
30-AUG-1999; 99JP-00242693.  
01-FEB-2000; 2000JP-00028896.  
XX  
PA (BIOI-) BIOINDUSTRY KYOKAI SH.  
PA (KANK-) KANKYO ENG KK.  
PA (KEIZ-) KEIZAI SANGYOSHO SANGYO GIJUTSU SOGO KEN.  
XX  
DR WPI; 2002-134193/18.  
XX  
PT Measurement of nucleic acids, using a nucleic acid probe and analysis of  
PT the obtained data.

XX Example 6; Page 18; 34pp; Japanese.  
CC This invention relates to a method for measuring nucleic acids using a  
CC nucleic acid probe labelled with a fluorochrome. The nucleic acid probe  
CC decreases the fluorescence of the fluorochrome when hybridised with a  
CC target nucleic acid, the decrease in the fluorescence is measured. The  
CC method can be used for measuring a target nucleic acid  
XX  
SQ Sequence 20 BP; 4 A; 0 C; 0 G; 16 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 2166 TTTT TTTT TTTT TTTT TTTT 2185  
| | | | | | | | | | | | | | | |

Db 1 TATATATATTTT TTTT TTTT 20  
RESULT 5065  
ABA97638/c  
ID ABA97638 standard; DNA; 20 BP.  
XX  
AC ABA97638;  
XX  
DT 11-APR-2002 (first entry)  
XX  
DE Poly t nucleotide sequence.  
XX  
KW ss; fluorochrome; nucleic acid probe; fluorescence.  
XX  
OS Unidentified.  
XX  
PN JP2001286300-A.  
XX  
PD 16-OCT-2001.

20-APR-2000; 2000JP-00120097.  
20-APR-1999; 99JP-00111601.  
24-AUG-1999; 99JP-00236666.  
30-AUG-1999; 99JP-00242693.  
01-FEB-2000; 2000JP-00028896.  
XX  
PA (BIOI-) BIOINDUSTRY KYOKAI SH.  
PA (KANK-) KANKYO ENG KK.  
PA (KEIZ-) KEIZAI SANGYOSHO SANGYO GIJUTSU SOGO KEN.  
XX  
DR WPI; 2002-134193/18.  
XX  
PT Measurement of nucleic acids, using a nucleic acid probe and analysis of  
PT the obtained data.

XX Example 6; Page 18; 34pp; Japanese.  
CC This invention relates to a method for measuring nucleic acids using a  
CC nucleic acid probe labelled with a fluorochrome. The nucleic acid probe  
CC decreases the fluorescence of the fluorochrome when hybridised with a  
CC target nucleic acid, the decrease in the fluorescence is measured. The  
CC method can be used for measuring a target nucleic acid  
XX  
SQ Sequence 20 BP; 4 A; 1 C; 0 G; 15 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 2785 GAAAAA AAAAAA AAAAAA 2804  
||||| ||||| ||||| ||  
Db 20 GAAAAA AAAAAA AAAAAA 1

RESULT 5066  
ABA97639  
ID ABA97639 standard; DNA; 20 BP.  
XX  
AC ABA97639;  
XX  
DT 11-APR-2002 (first entry)  
XX  
DE Poly u nucleotide sequence.  
XX  
KW ss; fluorochrome; nucleic acid probe; fluorescence.  
XX  
OS Unidentified.  
XX  
PN JP2001286300-A.  
XX  
PD 16-OCT-2001.





CC pathological pathways, developing diagnostic assays and new drug  
CC therapies for such disorders. The present DNA sequence represents a PCR  
CC primer used to amplify a human gene that is associated with high serum  
CC cholesterol, low serum HDL and/or cardiovascular disease  
XX  
SQ Sequence 20 BP; 3 A; 6 C; 7 G; 4 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 642 CGGGCCTGGCCGAGAACCTG 661  
DB 20 CAGCACTGGCCGAGATCCTG 1  
RESULT 5069  
ABK28025  
ID ABK28025 standard; DNA; 20 BP.  
XX  
AC ABK28025;  
XX  
DT 09-APR-2002 (first entry)  
XX  
DE Human CSNK2B methylation state PCR primer #1.  
XX  
KW Human; ss; astrocytoma; oligoastrocytoma; oligodendroglioma; antitumour;  
KW cytosine methylation state; single nucleotide polymorphism;  
KW SNP; CpG; brain tumour; PCR; primer.  
XX  
OS Homo sapiens.  
XX  
PN WO200200705-A2.  
XX  
PD 03-JAN-2002.  
XX  
PF 02-JUL-2001; 2001WO-EP007539.  
XX  
PR 30-JUN-2000; 2000DE-01032529.  
PR 01-SEP-2000; 2000DE-01043826.  
XX  
XX (EPIG-) EPIGENOMICS AG.  
XX  
PI Olek A, Piepenbrock C, Berlin K;  
XX  
DR WPI; 2002-139900/18.  
XX  
PT Oligonucleotide for diagnosing and treating tumors and cancer especially  
PT gliomas, astrocytomas and oligodendromas, comprises chemically modified  
PT genomic sequences of genes associated with tumors and cancers.  
XX  
PS Example 4; Page 20; 31pp; English.  
XX  
CC The invention relates to a nucleic acid (I) comprising a sequence of at  
CC least 18 bases of a segment of chemically pretreated genomic DNA (II)  
CC according to one of the sequences (S1) selected from 120 sequences, and  
CC its complementary sequences. Also included are an oligomer (III),  
CC especially an oligonucleotide or peptide nucleic acid (PNA)-oligomer,  
CC comprising a sequence of at least 9 nucleotides which hybridises to or is  
CC identical to (II), and complementary sequences, a set of oligomers (IV)  
CC comprising at least two (III) and their use for detecting the cytosine  
CC methylation state and/or single nucleotide polymorphisms (SNPs) in (II),  
CC and manufacturing (M1) an arrangement of different oligomers (array)  
CC fixed to a carrier material for analysing diseases associated with the  
CC methylation state of the CpG dinucleotide of (S1), where at least one  
CC oligomer is coupled to solid phase. The set of oligomers (IV) are useful  
CC as primer oligonucleotides for the amplification of (II) especially for  
CC characterising classifying and differentiating oligodendroglioma,  
CC astrocytoma and oligoastrocytoma tumours (by ascertaining genetic and/or  
CC epigenetic parameters of genomic DNA by analysing cytosine methylation  
CC and single nucleotide polymorphisms). The present sequence is a PCR  
CC primer used to amplify the modified genomic sequence from a gene  
CC associated with brain tumours

XX  
SQ Sequence 20 BP; 8 A; 0 C; 9 G; 3 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 2683 GGTGAAATGGAGATTGGAA 2702  
DB 1 GGGGAAATGGAGAGTGTA 20  
RESULT 5070  
ABK69224  
ID ABK69224 standard; DNA; 20 BP.  
XX  
AC ABK69224;  
XX  
DT 02-JUL-2002 (first entry)  
XX  
DE Human phosphorlyase kinase alpha 2 antisense oligonucleotide ISIS 118791.  
XX  
KW Antisense; phosphorlyase kinase alpha 2; metabolic disorder; ss;  
KW antidiabetic; antiinflammatory; antimicrobial; cytostatic; diabetes;  
KW infection; inflammation; tumour; human.  
XX  
OS Homo sapiens.  
XX  
FH Key Location/Qualifiers  
FT modified\_base 1..20 /\*tag= a  
FT /\*mod\_base= OTHER  
FT /\*note= "Phosphorothioate backbone"  
FT modified\_base 1..20 /\*tag= b  
FT /\*mod\_base= OTHER  
FT /\*note= "All cytosines are 5-methylcytosine"  
FT modified\_base 1..5 /\*tag= c  
FT /\*mod\_base= OTHER  
FT /\*note= "2'-O-methoxyethyl residues"  
FT modified\_base 16..20 /\*tag= d  
FT /\*mod\_base= OTHER  
FT /\*note= "2'-O-methoxyethyl residues"  
XX  
XX WO200220716-A2.  
XX  
PD 14-MAR-2002.  
XX  
XX 29-AUG-2001; 2001WO-US027065.  
XX  
XX 07-SEP-2000; 2000US-00657453.  
XX  
XX (ISIS-) ISIS PHARM INC.  
XX  
XX Monia BP, Wyatt JR;  
XX  
XX WPI; 2002-351772/38.  
XX  
XX New antisense compounds targeted to nucleic acids encoding phosphorlyase  
XX kinase alpha-2, useful for modulating gene expression and treating  
XX diseases associated with expression of phosphorlyase kinase alpha-2 in  
XX humans.  
XX  
XX Claim 3; Page 78; 119pp; English.  
XX  
CC The invention relates to an antisense compound 8-30 nucleobases in length  
CC targeted to a nucleic acid encoding phosphorlyase kinase alpha-2, which  
CC specifically hybridizes with and inhibits the expression of phosphorlyase  
CC kinase alpha-2. The antisense compound is useful for inhibiting the  
CC expression of phosphorlyase kinase alpha-2 in human cells or tissues, and  
CC for treating a human having a disease or condition associated with

CC phosphorylase kinase alpha-2 including metabolic disorder or diabetes.  
CC The antisense compound is useful for diagnostics, therapeutics,  
CC prophylaxis and as research reagent, in kits and is useful  
CC prophylactically to prevent or delay infection, inflammation or tumour  
CC formation. The antisense compound is safely and effectively administered  
CC to humans. The present sequence is an antisense oligonucleotide of the  
CC invention targetting human phopsphorylase kinase alpha 2  
XX  
SQ Sequence 20 BP; 7 A; 4 C; 4 G; 5 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 2455 CATGGGATCCCAATTTTAATA 2474  
Db 1 CATGGGAGCCATTTTAAACA 20  
  
RESULT 5071  
ABK88956  
ID ABK88956 standard; DNA; 20 BP.  
XX  
AC ABK88956;  
XX  
DT 21-OCT-2002 (first entry)  
XX  
DE Interleukin-10 (IL-10) DNA PCR primer #2.  
XX  
KW Interleukin-10; IL-10; PCR; ss; Th1-type T cell response; primer;  
KW Th2 cytokine; demyelinating disease; multiple sclerosis; antirheumatic;  
KW experimental autoimmune encephalitis; rheumatoid arthritis; antidiabetic;  
KW insulin dependent diabetes mellitus; immunosuppressive; neuroprotective;  
KW antiinflammatory; antiarthritic.  
XX  
OS Unidentified.  
XX  
PN US2002068715-A1.  
XX  
PD 06-JUN-2002.  
XX  
PF 05-SEP-2001; 2001US-00947770.  
XX  
PR 10-MAR-2000; 2000WO-US006233.  
XX  
PA (STEI/) STEINMAN L.  
PA (RUIZ/) RUIZ P.  
PA (GARR/) GARREN H.  
XX  
PI Steinman L, Ruiz P, Garren H;  
XX  
DR WPI; 2002-582492/62.  
XX  
PT Treating autoimmune diseases, e.g. demyelinating diseases in a mammal by  
PT co-administering a DNA encoding an autoantigen associated with the  
PT disease and DNA encoding a Th2 cytokine, particularly encoding  
PT interleukin-4.  
XX  
PS Example 3; Page 15; 36pp; English.  
XX  
CC The invention relates to treating an autoimmune disease in a mammal  
CC comprising introducing a DNA expression cassette with a sequence encoding  
CC at least a portion of an autoantigen associated with a pro-inflammatory,  
CC Th1-type T cell response under regulatory control of a promoter under  
CC conditions where the sequence is expressed and pro-inflammatory response  
CC of T cells that respond to the autoantigen is decreased. The construct  
CC can be incorporated in a vaccine also comprising a sequence encoding a  
CC Th2 cytokine under the regulatory control of a promoter that is active in  
CC a mammalian host. The method is useful for treating an autoimmune  
CC disease, preferably a demyelinating disease such as experimental  
CC autoimmune encephalitis and multiple sclerosis in a mammal, rheumatoid  
CC arthritis and insulin dependent diabetes mellitus. This sequence  
CC represents a PCR primer used to amplify DNA encoding interleukin-10 (IL-

CC 10), used in the scope of the invention  
XX  
SQ Sequence 20 BP; 4 A; 5 C; 6 G; 5 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 136 CTGGCGACTGTTTGGGGA 155  
Db 1 CTGGCCACAGTTTTCAGGGA 20  
  
RESULT 5072  
ABQ74646  
ID ABQ74646 standard; DNA; 20 BP.  
XX  
AC ABQ74646;  
XX  
DT 24-OCT-2002 (first entry)  
XX  
DE Ki67 gene antisense PCR primer SEQ ID NO:78.  
XX  
KW Human; PCR primer; identification; tumour senescence; cytotoxic; ss;  
KW abnormal cell proliferation; neoplastic cell growth; growth-inhibitory.  
XX  
OS Homo sapiens.  
OS Synthetic.  
XX  
PN WO200261134-A2.  
XX  
PD 08-AUG-2002.  
XX  
PF 21-DEC-2001; 2001WO-US050574.  
XX  
PR 21-DEC-2000; 2000US-0257907P.  
PR 17-DEC-2001; 2001US-00257907.  
XX  
PA (UNII ) UNIV ILLINOIS FOUND.  
XX  
PI Roninson IB, Chang B;  
XX  
DR WPI; 2002-619266/66.  
XX  
PT Identifying a compound that induces senescence in a mammalian p53  
PT deficient or tumor cell comprises assaying expression of cellular genes  
PT in the presence of the compound with expression of the genes in the  
PT absence of the compound.  
XX  
PS Example 4; Page 50; 73pp; English.  
XX  
CC The present invention describes a method for identifying a compound that  
CC induces senescence in a mammalian cell comprising culturing the cell in  
CC the presence and absence of the compound, assaying expression of at least  
CC one cellular gene (G1a) from 56 or a gene (G2) from 64 genes, with  
CC corresponding accession numbers given in the specification, and  
CC identifying compounds that induce senescence when expression of (G1a) or  
CC expression of (G2) is lower, in the presence of the compound. Also  
CC described: (1) a compound that induces senescence in a mammalian cell;  
CC (2) assessing efficacy of a treatment of a disease or condition relating  
CC to abnormal cell proliferation or neoplastic cell growth; (3) treating a  
CC disease or condition relating to abnormal cell proliferation or  
CC neoplastic cell growth; or (4) identifying a compound that inhibits  
CC senescence-associated induction of cellular gene expression. The compound  
CC is useful for treating or for assessing efficacy of treatment of a  
CC disease or condition relating to abnormal cell proliferation or  
CC neoplastic cell growth. The compound of the invention has a growth-  
CC inhibitory effect without producing systemic side effects found with  
CC other growth-inhibitory compounds. ABQ74611 to ABQ74734 represent PCR  
CC primers which are used in an example from the present invention  
XX  
SQ Sequence 20 BP; 8 A; 5 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1488 CCCTGGAGAAATGGAGAAA 1507  
Db 1 CCCTGGAGAACATAGGCAAA 20

RESULT 5073  
ABL94461/C

ID ABL94461 standard; DNA; 20 BP.

XX ABL94461;

XX 29-JUL-2002 (first entry)

XX Mouse C/EBP beta phosphorothioate antisense oligonucleotide, SEQ ID:228.

KW Mouse; murine; C/EBP beta; CCAAT/enhancer-binding protein beta; C/EPB2;  
KW LAP; TCF5; CRP2; NFIL6; IL6DBP; NF-M; AGP/EBP; Apc/EBP;  
KW transcription factor; tissue development; cellular function;  
KW proliferation; differentiation; hormone responsiveness;  
KW oxidative stress response; IL-6 signalling mediator; interleukin-6;  
KW carbohydrate metabolism; immunity; Th1 response; female fertility;  
KW gluconeogenesis; ovarian; cancer; tumour formation; type II; diabetes;  
KW infection; inflammation; expression inhibition; phosphorothioate;  
KW antisense oligonucleotide; ss.

XX Mus musculus.

XX Key Location/Qualifiers

FT modified\_base 1..20  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "Phosphorothioate linkages"

FT modified\_base 1..5  
FT /\*tag= b  
FT /mod\_base= OTHER  
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides. All 2' MOE  
FT cytosines are 5-methylcytosine"

FT modified\_base 16..20  
FT /\*tag= c  
FT /mod\_base= OTHER  
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides. All 2' MOE  
FT cytosines are 5-methylcytosine"

XX US6271030-B1.

XX 07-AUG-2001.

XX 14-JUN-2000; 2000US-00593711.

XX 14-JUN-2000; 2000US-00593711.

XX (ISIS-) ISIS PHARM INC.

XX Monia BP, Butler MM, Wyatt J;

XX WPI; 2002-214451/27.

XX Novel antisense compound targeted to nucleic acids encoding human or  
PT mouse CCAAT/enhancer binding protein (C/EBP) beta, useful in vitro for  
PT inhibiting expression of human or mouse C/EBP beta in cells/tissues.

XX Example 17; Col 53-54; 69pp; English.

XX Sequences ABL94252-ABL94476 represent antisense oligonucleotides targeted  
CC to the human or mouse CCAAT/enhancer-binding protein alpha (C/EBP alpha)  
CC gene, which inhibit its expression. The antisense oligonucleotides were  
CC designed to target different regions of the human and/or mouse C/EBP  
CC alpha RNA, and were analysed for their effect on C/EBP alpha mRNA levels  
CC by quantitative real-time PCR. The C/EBP family of proteins are a family

CC of transcription factors which regulate the expression of a wide range of  
CC genes that control normal tissue development, cellular function, cellular  
CC proliferation and functional differentiation. C/EBP beta (also known as  
CC C/EPB2, LAP, TCF5, CRP2, NFIL6, IL6DBP, NF-M, AGP/EBP and Apc/EBP)  
CC primarily regulates hormone responsiveness and oxidative stress responses  
CC and is a mediator of IL-6 (interleukin-6) signalling. C/EBP beta is  
CC thought to be involved in carbohydrate metabolism, immunity, the Th1  
CC response, female fertility and gluconeogenic pathways. C/EBP beta is  
CC expressed in the liver, lung, spleen, kidney, brain, and testis, with the  
CC highest expression found in the lung. It is also expressed at a higher  
CC level in malignant ovarian tissue compared with normal ovarian tissue,  
CC and its expression in pancreas is upregulated in response to chronically  
CC elevated levels of glucose, indicating that it is involved in the  
CC impairment of insulin secretion in type II diabetes. The oligonucleotides  
CC of the invention are useful for diagnosis, prevention and treatment of  
CC conditions associated with C/EBP beta expression, such as cancer  
CC (particularly ovarian cancer), tumour formation, diabetes (particularly  
CC type II diabetes), infection, or inflammation

XX

SQ Sequence 20 BP; 16 A; 4 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 2166 TTTT TTTT TTTT TTTT TTTT TTTT TTTT 2185  
Db 20 TTTT TGGT TTTT TTTT TTTT TTTT TTTT 1

RESULT 5074  
ABL94394

ID ABL94394 standard; DNA; 20 BP.

XX ABL94394;

XX 29-JUL-2002 (first entry)

XX Mouse C/EBP beta phosphorothioate antisense oligonucleotide, SEQ ID:160.

XX Mouse; murine; C/EBP beta; CCAAT/enhancer-binding protein beta; C/EPB2;  
KW LAP; TCF5; CRP2; NFIL6; IL6DBP; NF-M; AGP/EBP; Apc/EBP;  
KW transcription factor; tissue development; cellular function;  
KW proliferation; differentiation; hormone responsiveness;  
KW oxidative stress response; IL-6 signalling mediator; interleukin-6;  
KW carbohydrate metabolism; immunity; Th1 response; female fertility;  
KW gluconeogenesis; ovarian; cancer; tumour formation; type II; diabetes;  
KW infection; inflammation; expression inhibition; phosphorothioate;  
KW antisense oligonucleotide; ss.

XX Mus musculus.

XX Key Location/Qualifiers

FT modified\_base 1..20  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "Phosphorothioate linkages"

FT modified\_base 1..5  
FT /\*tag= b  
FT /mod\_base= OTHER  
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides. All 2' MOE  
FT cytosines are 5-methylcytosine"

FT modified\_base 16..20  
FT /\*tag= c  
FT /mod\_base= OTHER  
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides. All 2' MOE  
FT cytosines are 5-methylcytosine"

XX US6271030-B1.

XX 07-AUG-2001.

XX 14-JUN-2000; 2000US-00593711.



XX PR 14-JUN-2000; 2000US-00593711.  
XX PA (ISIS-) ISIS PHARM INC.  
XX PI Monia BP, Butler MM, Wyatt J;  
XX DR WPI; 2002-214451/27.  
XX PT Novel antisense compound targeted to nucleic acids encoding human or  
PT mouse CCAAT/enhancer binding protein (C/EBP) beta, useful in vitro for  
PT inhibiting expression of human or mouse C/EBP beta in cells/tissues.  
XX PS Example 17; Col 49-50; 69pp; English.  
XX CC Sequences ABL94252-ABL94476 represent antisense oligonucleotides targeted  
CC to the human or mouse CCAAT/enhancer-binding protein alpha (C/EBP alpha)  
CC gene, which inhibit its expression. The antisense oligonucleotides were  
CC designed to target different regions of the human and/or mouse C/EBP  
CC alpha RNA, and were analysed for their effect on C/EBP alpha mRNA levels  
CC by quantitative real-time PCR. The C/EBP family of proteins are a family  
CC of transcription factors which regulate the expression of a wide range of  
CC genes that control normal tissue development, cellular function, cellular  
CC proliferation and functional differentiation. C/EBP beta (also known as  
CC C/EPB2, LAP, TCF5, CRP2, NFIL6, IL6DBP, NF-M, AGP/EBP and Apc/EBP)  
CC primarily regulates hormone responsiveness and oxidative stress responses  
CC and is a mediator of IL-6 (interleukin-6) signalling. C/EBP beta is  
CC thought to be involved in carbohydrate metabolism, immunity, the Th1  
CC response, female fertility and gluconeogenic pathways. C/EBP beta is  
CC expressed in the liver, lung, spleen, kidney, brain, and testis, with the  
CC highest expression found in the lung. It is also expressed at a higher  
CC level in malignant ovarian tissue compared with normal ovarian tissue,  
CC and its expression in pancreas is upregulated in response to chronically  
CC elevated levels of glucose, indicating that it is involved in the  
CC impairment of insulin secretion in type II diabetes. The oligonucleotides  
CC of the invention are useful for diagnosis, prevention and treatment of  
CC conditions associated with C/EBP beta expression, such as cancer  
CC (particularly ovarian cancer), tumour formation, diabetes (particularly  
CC type II diabetes), infection, or inflammation  
XX SQ Sequence 20 BP; 0 A; 8 C; 12 G; 0 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 562 GCGGGCGGGTGAGCGCC 581  
Db 1 GCGGGCGGGCGCGCGGCC 20  
RESULT 5075  
ABL94252/c  
ID ABL94252 standard; DNA; 20 BP.  
XX AC ABL94252;  
XX DT 29-JUL-2002 (first entry)  
XX DE Human C/EBP beta phosphorothioate antisense oligonucleotide, SEQ ID:18.  
XX KW Human; C/EBP beta; CCAAT/enhancer-binding protein beta; C/EPB2; LAP;  
KW TCF5; CRP2; NFIL6; IL6DBP; NF-M; AGP/EBP; Apc/EBP; transcription factor;  
KW tissue development; cellular function; proliferation; differentiation;  
KW hormone responsiveness; oxidative stress response;  
KW IL-6 signalling mediator; interleukin-6; carbohydrate metabolism;  
KW immunity; Th1 response; female fertility; gluconeogenesis; ovarian;  
KW cancer; tumour formation; type II; diabetes; infection; inflammation;  
KW expression inhibition; phosphorothioate; antisense oligonucleotide; ss.  
XX OS Homo sapiens.  
XX FH Key Location/Qualifiers

FT modified\_base 1. .20  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "Phosphorothioate linkages"  
FT modified\_base 1. .5  
FT /\*tag= b  
FT /mod\_base= OTHER  
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides. All 2' MOE  
FT cytosines are 5-methylcytosine"  
FT modified\_base 16. .20  
FT /\*tag= c  
FT /mod\_base= OTHER  
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides. All 2' MOE  
FT cytosines are 5-methylcytosine"  
XX US6271030-B1.  
PN 07-AUG-2001.  
XX 14-JUN-2000; 2000US-00593711.  
XX 14-JUN-2000; 2000US-00593711.  
XX (ISIS-) ISIS PHARM INC.  
PI Monia BP, Butler MM, Wyatt J;  
XX WPI; 2002-214451/27.

Novel antisense compound targeted to nucleic acids encoding human or mouse CCAAT/enhancer binding protein (C/EBP) beta, useful in vitro for inhibiting expression of human or mouse C/EBP beta in cells/tissues.

Claim 1; Col 42; 69pp; English.

Sequences ABL94252-ABL94476 represent antisense oligonucleotides targeted to the human or mouse CCAAT/enhancer-binding protein alpha (C/EBP alpha) gene, which inhibit its expression. The antisense oligonucleotides were designed to target different regions of the human and/or mouse C/EBP alpha RNA, and were analysed for their effect on C/EBP alpha mRNA levels by quantitative real-time PCR. The C/EBP family of proteins are a family of transcription factors which regulate the expression of a wide range of genes that control normal tissue development, cellular function, cellular proliferation and functional differentiation. C/EBP beta (also known as C/EPB2, LAP, TCF5, CRP2, NFIL6, IL6DBP, NF-M, AGP/EBP and Apc/EBP) primarily regulates hormone responsiveness and oxidative stress responses and is a mediator of IL-6 (interleukin-6) signalling. C/EBP beta is thought to be involved in carbohydrate metabolism, immunity, the Th1 response, female fertility and gluconeogenic pathways. C/EBP beta is expressed in the liver, lung, spleen, kidney, brain, and testis, with the highest expression found in the lung. It is also expressed at a higher level in malignant ovarian tissue compared with normal ovarian tissue, and its expression in pancreas is upregulated in response to chronically elevated levels of glucose, indicating that it is involved in the impairment of insulin secretion in type II diabetes. The oligonucleotides of the invention are useful for diagnosis, prevention and treatment of conditions associated with C/EBP beta expression, such as cancer (particularly ovarian cancer), tumour formation, diabetes (particularly type II diabetes), infection, or inflammation

Sequence 20 BP; 0 A; 9 C; 8 G; 3 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 50 CGCGGCGGGCGGGCGGCAG 69

Db 20 CCCGGCAGCGGGCGGCAGCAG 1

RESULT 5076  
ABS70610





RESULT 5078  
ABI94468  
ID ABI94468 standard; DNA; 20 BP.  
XX AC ABI94468;  
XX DT 16-FEB-2002 (first entry)  
XX DE Capture oligonucleotide Zip ID#1555 oligo #9.  
XX KW Human; K-ras; PCR primer; probe; capture probe; mutation detection;  
KW ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease;  
KW infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer;  
KW oncogene; tumour suppressor; human papillomavirus; forensic;  
KW environmental monitoring; food industry; feed industry; ss.  
XX OS Synthetic.  
XX WO200179548-A2.  
XX PN 25-OCT-2001.  
XX PD 04-APR-2001; 2001WO-US010958.  
XX PF 14-APR-2000; 2000US-0197271P.  
XX PR (CORR ) CORNELL RES FOUND INC.  
XX PA Barany F, Zirvi M, Gerry NP, Favis R, Kliman R;  
XX PI WPI; 2002-034366/04.  
XX DR Designing capture oligonucleotide probes for use on a support to which  
XX complementary oligonucleotides hybridize with little mismatch.  
XX PS Example 5; Fig 29; 300pp; English.  
XX CC The present invention describes a method (M1) for designing capture  
CC oligonucleotide probes (I) for use on a support to which complementary  
CC oligonucleotide probes (II) will hybridise with little mismatch, where  
CC (I) have melting temperatures within a narrow range. The method is useful  
CC for detecting infectious diseases caused by bacterial infectious agents  
CC e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal  
CC infectious agents e.g. Cryptococcus neoformans, Candida albicans and  
CC Aspergillus fumigatus, viruses e.g. T-cell lymphocytotropic virus,  
CC Epstein-Barr virus and polio virus, and parasitic infectious agents  
CC selected from Onchocerca volvulus, Entamoeba histolytica and Dracunculus  
CC medinensis. The method is also useful for detecting genetic diseases such  
CC as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.  
CC Detecting cancer involving oncogenes, tumour suppressor genes, or genes  
CC involved in DNA amplification, replication, recombination or repair, the  
CC cancer is specifically associated with a gene selected from BRCA1 gene,  
CC p53 gene, human papillomavirus types 16 and 18 and liver cancers. The  
CC method is also used for environmental monitoring, forensics and the food  
CC and feed industry, detecting comprises scanning (using e.g. a scanning  
CC electron microscope and infrared microscope) the support at the  
CC particular sites and identifying if ligation of the oligonucleotide probe  
CC sets occurred and correlating (using a computer) identified ligation to a  
CC presence or absence of the target nucleotide sequences. ABI82074 to  
CC ABI97546 represent oligonucleotide sequences used in the exemplification  
CC of the present invention  
XX SQ Sequence 20 BP; 2 A; 7 C; 6 G; 5 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 1358 CACGGGTTTGGCAGCCAGGC 1377  
Db 1 CACGGCTTTGTACGCCGTGC 20

RESULT 5079  
ABL54171  
ID ABL54171 standard; DNA; 20 BP.  
XX AC ABL54171;  
XX DT 12-JUL-2002 (first entry)  
XX DE Oligonucleotide.  
XX KW B cell lymphoma/leukaemia-2; bcl-2; oncogene; antisense; lymphoma;  
KW leukaemia; colon carcinoma; rectal carcinoma; pancreatic cancer;  
KW breast cancer; ovarian cancer; prostate cancer; renal cell carcinoma;  
KW hepatoma; bile duct carcinoma; choriocarcinoma; cervical cancer;  
KW testicular cancer; lung carcinoma; bladder carcinoma; melanoma;  
KW head and neck cancer; brain cancer; cytostatic; human; gene therapy; ss.  
XX OS Homo sapiens.  
XX WO200217852-A2.  
XX PN 07-MAR-2002.  
XX PD 23-AUG-2001; 2001WO-US026414.  
XX PF 25-AUG-2000; 2000US-0227970P.  
XX PR 29-SEP-2000; 2000US-0237009P.  
XX PR 10-NOV-2000; 2000US-00709170.  
XX PA (GENT-) GENTA INC.  
XX PI Warrel RP, Klem RE, Fingert H;  
XX WPI; 2002-371796/40.  
XX DR Treating or preventing cancer, tumors and carcinomas, comprises  
XX administering B cell lymphoma/leukemia-2 antisense oligonucleotide at  
XX high doses for short period for time with one or more cancer  
XX therapeutics.  
XX PS Disclosure; Page 63; 64pp; English.  
XX CC The present invention is related to the use of a B cell  
CC lymphoma/leukaemia-2 (bcl-2) antisense oligonucleotide, particularly  
CC G3139 (see ABL54148), to treat and prevent bcl-2 related disorders.  
CC Administration at high doses results in significant therapeutic  
CC responses, including low toxicity, high tolerance and prolonged survival.  
CC Administration at high doses for short periods of time (less than 14  
CC days) also provides significant therapeutic responses in the treatment of  
CC cancer. The bcl-2 antisense oligomer may also be used to increase the  
CC sensitivity of a subject to cancer therapeutics, and in combination with  
CC hormone treatment or gene therapy. Conditions that may be treated or  
CC prevented include cancer of the haematopoietic system, skin, bone and  
CC soft tissue, reproductive system, genitourinary system, breast, endocrine  
CC system, brain, central nervous system, peripheral nervous system, kidney,  
CC lung, respiratory system, thorax, gastrointestinal and alimentary canal,  
CC lymph nodes, pancreas, hepatobiliary system, or cancer of unknown primary  
CC site, non-Hodgkin's lymphoma, Hodgkin's lymphoma, leukaemia, colon  
CC carcinoma, rectal carcinoma, pancreatic, breast, ovarian, prostate,  
CC cervical, testicular, head and neck or brain cancer, renal cell  
CC carcinoma, hepatoma, bile duct carcinoma, choriocarcinoma, lung  
CC carcinoma, bladder carcinoma and melanoma (all claimed). Note: The  
CC present sequence is given in the Sequence Listing from the present  
CC invention but the Seq ID No. is not referred to within the specification  
XX SQ Sequence 20 BP; 1 A; 6 C; 13 G; 0 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;





QY 2158 TTTTCTCCTTTTCTTTT 2177  
|||||  
Db 1 TTTTGGAAATTTTCTTTT 20

RESULT 5082  
ABZ99083  
ID ABZ99083 standard; DNA; 20 BP.  
XX  
AC ABZ99083;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human PDE4C oligonucleotide sequence.  
XX  
KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
XX  
OS Homo sapiens.  
XX  
PN WO200285308-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013135.  
XX  
PR 24-APR-2001; 2001US-0286137P.  
XX  
PA (EPIG-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
DR WPI; 2003-229219/22.  
XX  
PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
PS Disclosure; SEQ ID NO 14325; 872pp; English.  
XX  
CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 0 A; 5 C; 0 G; 15 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 2155 TTTTTCCTCTTTTCTTTT 2174  
|||||  
Db 1 TTTCTCTCTCTTTTCTTTT 20

RESULT 5083  
ABZ91619  
ID ABZ91619 standard; DNA; 20 BP.  
XX  
AC ABZ91619;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human oligonucleotide sequence.  
XX  
KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
XX  
OS Homo sapiens.  
XX  
PN WO200285308-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013135.  
XX  
PR 24-APR-2001; 2001US-0286137P.  
XX  
PA (EPIG-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
DR WPI; 2003-229219/22.  
XX  
PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
PS Disclosure; SEQ ID NO 6861; 872pp; English.  
XX  
CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of ubiquinone or  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 5 A; 0 C; 1 G; 14 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;





Qy 2154 ATTTTCTCCTTTT 2173  
|||  
pb 20 ATTTTCTCCTTTT 1

RESULT 5086  
ABZ86522/c  
ID ABZ86522 standard; DNA; 20 BP.

AC ABZ86522;

DT 17-OCT-2003 (first entry)

Human oligonucleotide sequence:

Human; antisense; lung dysfunction; nasal airway dysfunction;  
antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
antisense gene therapy; respiratory; lung; adenosine sensitivity;  
adenosine receptor; bronchodilation; lung; bronchoconstriction; lung allergy;  
lung inflammation; respiratory disease; ds.

OS Homo sapiens.

PN W0200285308-A2.

31-OCT-2002.

23-APR-2002: 2002WO-US013135.

PR 24-APR-2001: 2001US-0286137P.

PA (EPIG-) EPIGENESIS PHARM INC.

PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;

DR WPI; 2003-229219/22.

Pharmaceutical composition for treating ailments associated with impaired PT respiration, has oligo(s) antisense to specific gene(s) or its PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or PT ubiquinone.

PS Claim 15; SEQ ID NO 1764; 872pp; English.

The invention relates to a novel pharmaceutical composition, which has a first active agent comprising an oligonucleotide antisense to the initiation codon, coding region, 5' or 3' end genomic flanking regions, 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of junctions of genes encoding a polypeptide associated with lung and/or nasal airway dysfunction and a second active agent comprising an antiinflammatory steroid and ubiquinone. A composition of the invention has antiinflammatory, antiallergic, antiasthmatic, hypotensive, immunosuppressive, and cytostatic activity. The composition may have a use in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or malignant disease or condition, also for enhancing the prophylactic or therapeutic respiratory effect of an antiinflammatory steroid in a subject, for reducing or depleting levels of, or reducing sensitivity to adenosine, reducing levels of adenosine receptor, producing bronchodilation, increasing levels of ubiquinone or lung surfactant in a subject's tissue, or treating bronchoconstriction, lung inflammation, lung allergies, or a respiratory disease or condition. Note: The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from WIPO at [fto.wipo.int/pub/published](http://fto.wipo.int/pub/published) pct sequences

Sequence 20 BP; 15 A; 1 C; 3 G; 1 T; 0 U; 0 Other;

```

Query Match      0.5%;   Score 13.6;   DB 1;   Length 20;
Best Local Similarity 80.0%;   Pred. No. 4.5e+03;
Matches 16: Conservative 0; Mismatches 4; Indels 0; Gaps 0;

```

	2173	TTTTTTT	TTTTTTT	TAACTTT	21922
Qy					
D <sub>b</sub>	20	TTTTCTTGTTTCATCTTT	1		

RESULT 5087  
ABZ88944  
ID ABZ88944 standard; DNA; 20 BP.

AC ABZ88944;

DT 17-OCT-2003 (first entry)

Human oligonucleotide sequence.

Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW  
antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW  
antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW  
antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW  
adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW  
lung inflammation; respiratory disease; ds.

OS. Homo sapiens.

PN WO200285308-A2.

PD 31-OCT-2002.

23-APR-2002; 2002WO-US013135.

PR 24-APR-2001; 2001US-0286137P.

PA (EPIG-) EPIGENESIS PHARM INC.

PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;

DR WPI; 2003-229219/22.

Pharmaceutical composition for treating ailments associated with impaired PT respiration, has oligo(s) antisense to specific gene(s) or its PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or PT ubiquinone.

PS Disclosure; SEQ ID NO 4186; 872pp; English.

The invention relates to a novel pharmaceutical composition, which has a first active agent comprising an oligonucleotide antisense to the initiation codon, coding region, 5' or 3' end genomic flanking regions, 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of junctions of genes encoding a polypeptide associated with lung and/or nasal airway dysfunction and a second active agent comprising an antiinflammatory steroid and ubiquinone. A composition of the invention has antiinflammatory, antiallergic, antiasthmatic, hypotensive, immunosuppressive, and cytostatic activity. The composition may have a use in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or malignant disease or condition, also for enhancing the prophylactic or therapeutic respiratory effect of an antiinflammatory steroid in a subject, for reducing or depleting levels of, or reducing sensitivity to adenosine, reducing levels of adenosine receptor, producing bronchodilation, increasing levels of ubiquinone or lung surfactant in a subject's tissue, or treating bronchoconstriction, lung inflammation, lung allergies, or a respiratory disease or condition. Note: The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from WIPO at [ftp.wipo.int/pub/published/pct/sequences](http://ftp.wipo.int/pub/published/pct/sequences)

SQ Sequence 20 BP; 5 A; 3 C; 7 G; 5 T; 0 U; 0 Other;

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Query Match          0.5%;      Score 13.6;  DB 1;      Length 20;
Best Local Similarity 80.0%;      Pred. No. 4.5e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
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QY 721 GTTGCTGCACGATCAGACAG 740  
| | | | | | | | | | | | | | | |  
Db 1 GATGCTGTGCGATTAGACAG 20  
  
RESULT 5088  
ABZ89490/c  
ID ABZ89490 standard; DNA; 20 BP.  
XX  
AC ABZ89490;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human oligonucleotide sequence.  
XX  
KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; lung; adenosine sensitivity;  
KW lung inflammation; bronchodilation; bronchoconstriction; lung allergy;  
XX lung inflammation; respiratory disease; ds.  
OS Homo sapiens.  
XX  
PN WO200285308-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013135.  
XX  
PR 24-APR-2001; 2001US-0286137P.  
XX  
PA (EPIC-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
DR WPI; 2003-229219/22.  
XX  
PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
PS Disclosure; SEQ ID NO 4732; 872pp; English.  
XX  
CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 15 A; 1 C; 1 G; 3 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 2157 TTTTCTCCTTTTTTTTTTTT 2176  
| | | | | | | | | | | | | | | |  
Db 20 TTTAACTGATTTTTTTTTTT 1  
  
RESULT 5089  
ABZ89503  
ID ABZ89503 standard; DNA; 20 BP.  
XX  
AC ABZ89503;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human oligonucleotide sequence.  
XX  
KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
XX lung inflammation; respiratory disease; ds.  
OS Homo sapiens.  
XX  
PN WO200285308-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013135.  
XX  
PR 24-APR-2001; 2001US-0286137P.  
XX  
PA (EPIC-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
DR WPI; 2003-229219/22.  
XX  
PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
PS Disclosure; SEQ ID NO 4745; 872pp; English.  
XX  
CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 11 A; 1 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;



QY

2774

TTGTTAGAAATTGAAAAAAA 2793

|||||

1

TTGTACAGATTGAAAAAAA 20

Db

RESULT 5090

ABZ90826/c

ID

ABZ90826

standard; DNA; 20 BP.

XX

AC

ABZ90826;

XX

DT

17-OCT-2003

(first entry)

XX

DE

Human oligonucleotide sequence.

XX

KW

Human; antisense; lung dysfunction; nasal airway dysfunction; antiinflammatory steroid; ubi

KW

antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy; antisense gene therapy; respiratory; lung; adenosine sensitivity; adenosine receptor; bronchodilation; bronchoconstriction; lung allergy; lung inflammation; respiratory disease; ds.

XX

OS

Homo sapiens.

XX

PN

WO200285308-A2.

XX

PD

31-OCT-2002.

XX

XX

23-APR-2002; 2002WO-US013135.

XX

PR

24-APR-2001; 2001US-0286137P.

XX

PA

(EPIG-) EPIGENESIS PHARM INC.

XX

PI

Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D; Miller S, Tang L, Shahabuddin S;

PI

WPI; 2003-229219/22.

XX

XX

Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or ubi

XX

PS

Disclosure; SEQ ID NO 6068; 872pp; English.

XX

CC

The invention relates to a novel pharmaceutical composition, which has a first active agent comprising an oligonucleotide antisense to the initiation codon, coding region, 5' or 3' end genomic flanking regions, 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of junctions of genes encoding a polypeptide associated with lung and/or nasal airway dysfunction and a second active agent comprising an antiinflammatory steroid and ubi

CC

has antiinflammatory, antiallergic, antiasthmatic, hypotensive, immunosuppressive, and cytostatic activity. The composition may have a use in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or malignant disease or condition, also for enhancing the prophylactic or therapeutic respiratory effect of an antiinflammatory steroid in a subject, for reducing or depleting levels of, or reducing sensitivity to adenosine, reducing levels of ubi

CC

receptor, producing bronchodilation, increasing levels of ubi

CC

lung surfactant in a subject's tissue, or treating bronchoconstriction, lung inflammation, lung allergies, or a respiratory disease or condition. Note: The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

XX

SQ

Sequence 20 BP; 6 A; 2 C; 9 G; 3 T; 0 U; 0 Other;

Query Match

Best Local Similarity

0.5%;

Score 13.6;

DB 1;

Length 20;

Matches 16;

Conservative 0;

Mismatches 4;

Indels 0;

Gaps 0;

QY

344

TTTCCCTCCCTACCAGCA 363

|||||

20

TATTCCTCTTGCCAGCA 1

Db

RESULT 5091

ABZ98749

ID

ABZ98749

standard; DNA; 20 BP.

XX

AC

ABZ98749;

XX

DT

17-OCT-2003

(first entry)

XX

DE

Human tryptase a oligonucleotide sequence.

XX

KW

Human; antisense; lung dysfunction; nasal airway dysfunction; antiinflammatory steroid; ubi

KW

antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy; antisense gene therapy; respiratory; lung; adenosine sensitivity; adenosine receptor; bronchodilation; bronchoconstriction; lung allergy; lung inflammation; respiratory disease; ds.

XX

OS

Homo sapiens.

XX

PN

WO200285308-A2.

XX

PD

31-OCT-2002.

XX

XX

23-APR-2002; 2002WO-US013135.

XX

PR

24-APR-2001; 2001US-0286137P.

XX

PA

(EPIG-) EPIGENESIS PHARM INC.

XX

PI

Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D; Miller S, Tang L, Shahabuddin S;

PI

WPI; 2003-229219/22.

XX

XX

Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or ubi

XX

PS

Disclosure; SEQ ID NO 13991; 872pp; English.

XX

CC

The invention relates to a novel pharmaceutical composition, which has a first active agent comprising an oligonucleotide antisense to the initiation codon, coding region, 5' or 3' end genomic flanking regions, 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of junctions of genes encoding a polypeptide associated with lung and/or nasal airway dysfunction and a second active agent comprising an antiinflammatory steroid and ubi

CC

has antiinflammatory, antiallergic, antiasthmatic, hypotensive, immunosuppressive, and cytostatic activity. The composition may have a use in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or malignant disease or condition, also for enhancing the prophylactic or therapeutic respiratory effect of an antiinflammatory steroid in a subject, for reducing or depleting levels of, or reducing sensitivity to adenosine, reducing levels of ubi

CC

receptor, producing bronchodilation, increasing levels of ubi

CC

lung surfactant in a subject's tissue, or treating bronchoconstriction, lung inflammation, lung allergies, or a respiratory disease or condition. Note: The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

XX

SQ

Sequence 20 BP; 4 A; 3 C; 7 G; 6 T; 0 U; 0 Other;

Query Match

Best Local Similarity

0.5%;

Score 13.6;

DB 1;

Length 20;

Matches 16;

Conservative 0;

Mismatches 4;

Indels 0;

Gaps 0;



QY 2440 ACGACTTTTGTGAGACATGG 2459  
| | | | | | | | | | | | | | | |  
Db 1 ACGGCTTTTGTGGGACATAG 20

RESULT 5092  
ABZ98961  
ID ABZ98961 standard; DNA; 20 BP.  
XX  
AC ABZ98961;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human PDB4A oligonucleotide sequence.  
XX  
KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.

XX  
OS Homo sapiens.  
XX  
PN WO200285308-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013135.  
XX  
PR 24-APR-2001; 2001US-0286137P.  
XX  
PA (EPIG-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
DR WPI; 2003-229219/22.

XX  
PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.

XX  
PS Disclosure; SEQ ID NO 14203; 872pp; English.  
XX  
CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences

XX  
SQ Sequence 20 BP; 5 A; 5 C; 8 G; 2 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 203 GAGGACTGCGAGGATCGCCA 222  
| | | | | | | | | | | | | | | |  
Db 1 GAGGCGCGGAGAAATCTCCA 20

RESULT 5093  
ABZ88835  
ID ABZ88835 standard; DNA; 20 BP.  
XX  
AC ABZ88835;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human oligonucleotide sequence.  
XX  
KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.

XX  
OS Homo sapiens.  
XX  
PN WO200285308-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013135.  
XX  
PR 24-APR-2001; 2001US-0286137P.  
XX  
PA (EPIG-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
DR WPI; 2003-229219/22.

XX  
PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.

XX  
PS Disclosure; SEQ ID NO 4077; 872pp; English.  
XX  
CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences

XX  
SQ Sequence 20 BP; 2 A; 2 C; 1 G; 15 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy	2158	TTTTCTCCTTTTTTTTTT	2177
Db	1	TTATTTCCTTTTATTGTT	20

RESULT 5094	
ABZ90740	
ID	ABZ90740 standard; DNA; 20 BP.
XX	
AC	ABZ90740;
XX	
DT	17-OCT-2003 (first entry)
XX	
DE	Human oligonucleotide sequence.

Human; antisense; lung dysfunction; nasal airway dysfunction;  
antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
antisense gene therapy; respiratory; lung; adenosine sensitivity;  
adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
lung inflammation; respiratory disease; ds.

OS Homo sapiens.

PN WO200285308-A2.

31-OCT-2002.  
PD

PF 23-APR-2002; 2002WO-US013135.

PR 24-APR-2001; 2001US-0286137P.

PA (EPIG-) EPIGENESIS PHARM INC.

PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;

DR WPI; 2003-229219/22.

Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or ubiquinone.

PS Disclosure; SEQ ID NO 5982; 872pp; English.

The invention relates to a novel pharmaceutical composition, which has a first active agent comprising an oligonucleotide antisense to the initiation codon, coding region, 5' or 3' end genomic flanking regions, 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of junctions of genes encoding a polypeptide associated with lung and/or nasal airway dysfunction and a second active agent comprising an antiinflammatory steroid and ubiquinone. A composition of the invention has antiinflammatory, antiallergic, antiasthmatic, hypotensive, immunosuppressive, and cytostatic activity. The composition may have a use in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or malignant disease or condition, also for enhancing the prophylactic or therapeutic respiratory effect of an antiinflammatory steroid in a subject, for reducing or depleting levels of, or reducing sensitivity to adenosine, reducing levels of adenosine receptor, producing bronchodilation, increasing levels of ubiquinone or lung surfactant in a subject's tissue, or treating bronchoconstriction, lung inflammation, lung allergies, or a respiratory disease or condition. Note: The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from WIPO at [ftp.wipo.int/pub/published/pct/sequences](http://ftp.wipo.int/pub/published/pct/sequences)

SQ Sequence 20 BP; 8 A; 2 C; 3 G; 7 T; 0 U; 0 Other;

Query Match	0.5%	Score 13.6;	DB 1;	Length 20;
Best Local Similarity	80.0%;	Pred. No. 4.5e+03;		
Matches 16;	Conservative	0;	Mismatches 4;	Indels 0;
				Gaps 0;

Qy 2527 ATATATACAGGGTATTAA 2546  
||| ||| ||| ||| ||| |||  
Dp 1 ATGTATACACTGAGTATTAA 20

RESULT 5095  
ABZ99023/C  
ID ABZ99023 standard; DNA; 20 BP.  
XX  
XX ABZ99023;  
XX AC  
XX AC  
DT 17-OCT-2003 (first entry)  
XX  
XX  
DE Human PDE4A oligonucleotide sequence.

Human; antisense; lung dysfunction; nasal airway dysfunction;  
 antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
 antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
 antisense gene therapy; respiratory; lung; adenosine sensitivity;  
 adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
 lung inflammation; respiratory disease; ds.

OS Homo sapiens.

PN WO200285308-A2

31-OCT-2002.

23-APR-2002: 2002WO-US013135.

PR 24-APR-2001: 2001US-0286137P.

PA (EPIG-) EPIGENESIS PHARM INC.

PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;

DR WPI: 2003-229219/22.

Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or ubiquinone.

PS Disclosure: SEO ID NO 14265: 872pp: English: AA

The invention relates to a novel pharmaceutical composition, which has a first active agent comprising an oligonucleotide antisense to the initiation codon, coding region, 5' or 3' end genomic flanking regions, 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of junctions of genes encoding a polypeptide associated with lung and/or nasal airway dysfunction and a second active agent comprising an antiinflammatory steroid and ubiquinone. A composition of the invention has antiinflammatory, antiallergic, antiasthmatic, hypotensive, immunosuppressive, and cytostatic activity. The composition may have a use in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or malignant disease or condition, also for enhancing the prophylactic or therapeutic respiratory effect of an antiinflammatory steroid in a subject, for reducing or depleting levels of, or reducing sensitivity to adenosine, reducing levels of adenosine receptor, producing bronchodilation, increasing levels of ubiquinone or lung surfactant in a subject's tissue, or treating bronchoconstriction, lung inflammation, lung allergies, or a respiratory disease or condition. Note: The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from WIPO at [ftp.wipo.int/pub/published/pct/sequences](http://ftp.wipo.int/pub/published/pct/sequences)

Sequence 20 BP: 4 A; 11 C; 4 G; 1 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 106 GCTTGGGGGCTGGGGGATC 125  
Db 20 GCTGGTGGGCTGGTGGGACC 1

RESULT 5096  
ABZ90288/c  
ID ABZ90288 standard; DNA; 20 BP.  
XX  
AC ABZ90288;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human oligonucleotide sequence.  
XX  
KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
XX  
OS Homo sapiens.  
XX  
PN WO200285308-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013135.  
XX  
PR 24-APR-2001; 2001US-0286137P.  
XX  
PA (EPIG-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
DR WPI; 2003-229219/22.  
XX  
PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
PS Disclosure; SEQ ID NO 5530; 872pp; English.  
XX  
CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 2 A; 2 C; 2 G; 14 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 2784 TGAATAAAAAAAAAAAAAA 2803  
Db 20 TGAATAAAAAAAAAAGAACCTAA 1

RESULT 5097  
ABZ91627/c  
ID ABZ91627 standard; DNA; 20 BP.  
XX  
AC ABZ91627;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human oligonucleotide sequence.  
XX  
KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
XX  
OS Homo sapiens.  
XX  
PN WO200285308-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013135.  
XX  
PR 24-APR-2001; 2001US-0286137P.  
XX  
PA (EPIG-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
DR WPI; 2003-229219/22.  
XX  
PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
PS Disclosure; SEQ ID NO 6869; 872pp; English.  
XX  
CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 10 A; 4 C; 2 G; 4 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;



Qy 1793 TTTCTTCTCTGAAAGTGGT 1812  
 ||||| | |||||  
 Db 20 TTTCTTTTTCGAAAATGGT 1  
 ||||| | |||||

RESULT 5098  
ABZ89922/c  
ID ABZ89922 standard; DNA; 20 BP.

Human; antitense; lung dysfunction; nasal airway dysfunction;  
antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
antitense gene therapy; respiratory; lung; adenosine sensitivity;  
adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
lung inflammation; respiratory disease; ds.

OS Homo sapiens.

PN WO200285308-A2.

31-OCT-2002  
PD

PF 23-APR-2002: 2002WO-US013135.

PR 24-APR-2001: 2001US-0286137P.

PA (EPIG-) EPIGENESIS PHARM INC.

Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;

DR WPI; 2003-229219/22.

Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or ubiquinone.

PS Disclosure; SEQ ID NO 5164: 872bp; English.

The invention relates to a novel pharmaceutical composition, which has a first active agent comprising an oligonucleotide antisense to the initiation codon, coding region, 5' or 3' end genomic flanking regions, 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of junctions of genes encoding a polypeptide associated with lung and/or nasal airway dysfunction and a second active agent comprising an antiinflammatory steroid and ubiquinone. A composition of the invention has antiinflammatory, antiallergic, antiasthmatic, hypotensive, immunosuppressive, and cytostatic activity. The composition may have a use in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or malignant disease or condition, also for enhancing the prophylactic or therapeutic respiratory effect of an antiinflammatory steroid in a subject, for reducing or depleting levels of, or reducing sensitivity to adenosine, reducing levels of adenosine receptor, producing bronchodilation, increasing levels of ubiquinone or lung surfactant in a subject's tissue, or treating bronchoconstriction, lung inflammation, lung allergies, or a respiratory disease or condition. Note: The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from WIPO at [ftp.wipo.int/pub/published/pct/sequences](http://ftp.wipo.int/pub/published/pct/sequences)

SQ Sequence 20 BP; 7 A; 4 C; 4 G; 5 T; 0 U; 0 Other;

Query Match	0.5%;	Score 13.6;	DB 1;	Length 20;
Best Local Similarity	80.0%;	Pred. No. 4.5e+03;		
Matches 16; Conservative	0;	Mismatches 4;	Indels 0;	Gaps 0;

**QY**      2509 CATCATAAAGGTTTATTTCAT 2528  
         ||| |||| | ||||| ||||  
**Dd**      20 CAGCATAGCGGTTTATTTCAT 1

RESULT 5099  
ABZ97376/c  
ID ABZ97376 standard; DNA; 20 BP.

Human; antisense; lung dysfunction; nasal airway dysfunction;  
antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
antisense gene therapy; respiratory; lung; adenosine sensitivity;  
adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
lung inflammation; respiratory disease; ds.

OS Homo sapiens.

PN WO200285308-A2.

PD 31-OCT-2002.

23-APR-2002; 2002WO-US013135-  
PF  
PF

PR 24-APR-2001; 2001US-0286137P.

PA (EPIG-) EPIGENESIS PHARM INC.

PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;

DR WPI; 2003-229219/22.

Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or ubiquinone.

PS Disclosure; SEQ ID NO 12618; 872pp; English.

The invention relates to a novel pharmaceutical composition, which has a first active agent comprising an oligonucleotide antisense to the initiation codon, coding region, 5' or 3' end genomic flanking regions, 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of junctions of genes encoding a polypeptide associated with lung and/or nasal airway dysfunction and a second active agent comprising an antiinflammatory steroid and ubiquinone. A composition of the invention has antiinflammatory, antiallergic, antiasthmatic, hypotensive, immunosuppressive, and cytostatic activity. The composition may have a use in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or malignant disease or condition, also for enhancing the prophylactic or therapeutic respiratory effect of an antiinflammatory steroid in a subject, for reducing or depleting levels of, or reducing sensitivity to adenosine, reducing levels of adenosine receptor, producing bronchodilation, increasing levels of ubiquinone or lung surfactant in a subject's tissue, or treating bronchoconstriction, lung inflammation, lung allergies, or a respiratory disease or condition. Note: The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published pct sequences

SQ Sequence 20 BP; 1 A; 7 C; 3 G; 9 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;



QY 1501 GGAGAAACACAGGAATAAAA 1520  
|||||  
Db 20 GGAGCAACACAGGACATGAA 1

RESULT 5100  
ABZ89225/c  
ID ABZ89225 standard; DNA; 20 BP.  
XX  
AC ABZ89225;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human oligonucleotide sequence.  
XX  
KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
XX  
OS Homo sapiens.  
XX WO200285308-A2.  
PN  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013135.  
XX  
PR 24-APR-2001; 2001US-0286137P.  
XX  
PA (EPIG-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
DR WPI; 2003-229219/22.  
XX  
PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
PS Disclosure; SEQ ID NO 4467; 872pp; English.  
XX  
CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 9 A; 1 C; 1 G; 9 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 2464 CAATTTTAATATTAACTTT 2483  
|||||  
Db 20 CAATGTTAAAAATAATTTT 1

RESULT 5101  
ABZ90987  
ID ABZ90987 standard; DNA; 20 BP.  
XX  
AC ABZ90987;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human oligonucleotide sequence.  
XX  
KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
XX  
OS Homo sapiens.  
XX WO200285308-A2.  
PN  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013135.  
XX  
PR 24-APR-2001; 2001US-0286137P.  
XX  
PA (EPIG-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
DR WPI; 2003-229219/22.  
XX  
PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
PS Disclosure; SEQ ID NO 6229; 872pp; English.  
XX  
CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 4 A; 2 C; 11 G; 3 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1605 TGGCTGGGGGAAGATTG 1624  
||||| ||||| ||||| |||||  
Db 1 TGGCCAGGGGGAAGTGGATG 20

RESULT 5102  
ABZ95794/c  
ID ABZ95794 standard; DNA; 20 BP.  
XX  
AC ABZ95794;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human tumour necrosis factor antisense fragment no.1658.  
XX  
KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.

OS Homo sapiens.  
XX  
XX WO200285308-A2.  
XX  
PD 31-OCT-2002.  
XX  
XX 23-APR-2002; 2002WO-US013135.  
XX  
XX 24-APR-2001; 2001US-0286137P.  
XX  
XX (EPIG-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
XX WPI; 2003-229219/22.

Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or ubiquinone.

Disclosure; SEQ ID NO 11036; 872pp; English.  
The invention relates to a novel pharmaceutical composition, which has a first active agent comprising an oligonucleotide antisense to the initiation codon, coding region, 5' or 3' end genomic flanking regions, 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of junctions of genes encoding a polypeptide associated with lung and/or nasal airway dysfunction and a second active agent comprising an antiinflammatory steroid and ubiquinone. A composition of the invention has antiinflammatory, antiallergic, antiasthmatic, hypotensive, immunosuppressive, and cytostatic activity. The composition may have a use in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or malignant disease or condition, also for enhancing the prophylactic or therapeutic respiratory effect of an antiinflammatory steroid in a subject, for reducing or depleting levels of, or reducing sensitivity to adenosine, reducing levels of ubiquinone or receptor, producing bronchodilation, increasing levels of ubiquinone or lung surfactant in a subject's tissue, or treating bronchoconstriction, lung inflammation, lung allergies, or a respiratory disease or condition. Note: The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 20 BP; 0 A; 9 C; 6 G; 5 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 478 CGGCCCCAGAGCCAGGAGG 497  
||||| ||||| ||||| |||||  
Db 20 CGGCCCCAGAGGGAAGAGG 1

RESULT 5103  
ABZ89376  
ID ABZ89376 standard; DNA; 20 BP.  
XX  
AC ABZ89376;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human oligonucleotide sequence.  
XX  
KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.

OS Homo sapiens.  
XX  
XX WO200285308-A2.  
XX  
PD 31-OCT-2002.  
XX  
XX 23-APR-2002; 2002WO-US013135.  
XX  
XX 24-APR-2001; 2001US-0286137P.  
XX  
XX (EPIG-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
XX WPI; 2003-229219/22.

Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or ubiquinone.

Disclosure; SEQ ID NO 4618; 872pp; English.  
The invention relates to a novel pharmaceutical composition, which has a first active agent comprising an oligonucleotide antisense to the initiation codon, coding region, 5' or 3' end genomic flanking regions, 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of junctions of genes encoding a polypeptide associated with lung and/or nasal airway dysfunction and a second active agent comprising an antiinflammatory steroid and ubiquinone. A composition of the invention has antiinflammatory, antiallergic, antiasthmatic, hypotensive, immunosuppressive, and cytostatic activity. The composition may have a use in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or malignant disease or condition, also for enhancing the prophylactic or therapeutic respiratory effect of an antiinflammatory steroid in a subject, for reducing or depleting levels of, or reducing sensitivity to adenosine, reducing levels of ubiquinone or receptor, producing bronchodilation, increasing levels of ubiquinone or lung surfactant in a subject's tissue, or treating bronchoconstriction, lung inflammation, lung allergies, or a respiratory disease or condition. Note: The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 20 BP; 3 A; 5 C; 5 G; 7 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1057 TCATGTGACTCTCCTGACAT 1076  
Db 1 TCATGTGAGCCTCGTGTCAT 20

RESULT 5104  
ABZ92584/c  
ID ABZ92584 standard; DNA; 20 BP.  
XX  
AC ABZ92584;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human oligonucleotide sequence.  
XX

KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
XX

OS Homo sapiens.  
XX  
PN WO200285308-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013135.  
XX  
PR 24-APR-2001; 2001US-0286137P.  
XX  
PA (EPIG-) EPIGENESIS PHARM INC.  
XX

PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
DR WPI; 2003-229219/22.  
XX

PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX

PS Disclosure; SEQ ID NO 7826; 872pp; English.  
XX

CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX

SQ Sequence 20 BP; 3 A; 6 C; 7 G; 4 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 809 GGGCGCGTAATGAACCCAC 828  
Db 20 GGGCGCCTGATGTACCAC 1

RESULT 5105  
ABZ98728/c  
ID ABZ98728 standard; DNA; 20 BP.  
XX  
AC ABZ98728;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human tryptase a oligonucleotide sequence.  
XX

KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
XX

OS Homo sapiens.  
XX  
PN WO200285308-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013135.  
XX  
PR 24-APR-2001; 2001US-0286137P.  
XX  
PA (EPIG-) EPIGENESIS PHARM INC.  
XX

PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
DR WPI; 2003-229219/22.  
XX

PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX

PS Disclosure; SEQ ID NO 13970; 872pp; English.  
XX

CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of ubiquinone or  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX

SQ Sequence 20 BP; 2 A; 8 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;







QY 2152 TGATTTTTCCTCTTTT 2171  
|| ||||| |||||  
Db 20 TGGTTTTCCTCTTCT 1

RESULT 5108  
ABZ90974/C  
ID ABZ90974 standard; DNA; 20 BP.  
XX  
AC ABZ90974;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human oligonucleotide sequence.  
XX  
KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.  
OS  
XX WO200285308-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013135.  
XX  
PR 24-APR-2001; 2001US-0286137P.  
XX  
PA (EPIG-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
DR WPI; 2003-229219/22.  
XX

PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.

XX Disclosure; SEQ ID NO 6216; 872pp; English.  
XX  
CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX

SQ Sequence 20 BP; 7 A; 3 C; 6 G; 4 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1909 GATCAACAATACCTTTT 1928  
||||| ||||| |||||  
Db 20 GATCACCACATGCCTGCTTT 1

RESULT 5109  
ABZ91436/C  
ID ABZ91436 standard; DNA; 20 BP.  
XX  
AC ABZ91436;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human oligonucleotide sequence.  
XX  
KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.  
OS  
XX WO200285308-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013135.  
XX  
PR 24-APR-2001; 2001US-0286137P.  
XX  
PA (EPIG-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
DR WPI; 2003-229219/22.  
XX

PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.

XX Disclosure; SEQ ID NO 6678; 872pp; English.  
XX  
CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX

SQ Sequence 20 BP; 0 A; 5 C; 11 G; 4 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 35 ACAGCAAGCGCCGCGCGCG 54  
||| ||| ||| ||| ||| |||  
Db 20 ACCGCAAGCGCCGCGCCACGG 1

RESULT 5110  
ABZ88937  
ID ABZ88937 standard; DNA; 20 BP.  
XX  
AC ABZ88937;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human oligonucleotide sequence.  
XX  
KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
XX  
OS Homo sapiens.  
XX  
PN WO200285308-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013135.  
XX  
PR 24-APR-2001; 2001US-0286137P.  
XX  
PA (EPIG-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
DR WPI; 2003-229219/22.  
XX  
PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
PS Disclosure; SEQ ID NO 4179; 872pp; English.  
XX  
CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX

Sequence 20 BP; 13 A; 3 C; 2 G; 2 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 2779 AGAATTGAAAAA 2798  
||| ||| ||| ||| ||| |||  
Db 1 AGCACTGTCAAAAAA 20

RESULT 5111  
ABZ98627  
ID ABZ98627 standard; DNA; 20 BP.  
XX  
AC ABZ98627;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human tryptase a oligonucleotide sequence.  
XX  
KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
XX  
OS Homo sapiens.  
XX  
PN WO200285308-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013135.  
XX  
PR 24-APR-2001; 2001US-0286137P.  
XX  
PA (EPIG-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
DR WPI; 2003-229219/22.  
XX  
PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
PS Disclosure; SEQ ID NO 13869; 872pp; English.  
XX  
CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX

Sequence 20 BP; 3 A; 8 C; 7 G; 2 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 568 CGCGGTGAGCGCCGCGAGGG 587  
||||| ||| ||| ||| |||  
Db 1 CGCGGTGAGCACCCACTGGG 20

RESULT 5112  
ABZ85307  
ID ABZ85307 standard; DNA; 20 BP.

XX AC ABZ85307;  
XX DT 17-OCT-2003 (first entry)  
XX DE Human oligonucleotide sequence.  
XX KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.

XX OS Homo sapiens.

XX PN WO200285308-A2.

XX PD 31-OCT-2002.

XX PF 23-APR-2002; 2002WO-US013135.

XX PR 24-APR-2001; 2001US-0286137P.

XX PA (EPIG-) EPIGENESIS PHARM INC.

XX PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-229219/22.

XX PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.

XX PS Claim 15; SEQ ID NO 549; 872pp; English.

XX CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences

XX SQ Sequence 20 BP; 2 A; 1 C; 3 G; 14 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 2173 TTTTGTGTTTAACTTT 2192  
||||| ||| ||| ||| |||  
Db 1 TTTGTGTTTCAAGTTT 20

RESULT 5113  
ABZ85307/c  
ID ABZ85307 standard; DNA; 20 BP.

XX AC ABZ85307;  
XX DT 17-OCT-2003 (first entry)  
XX DE Human oligonucleotide sequence.  
XX KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.

XX OS Homo sapiens.

XX PN WO200285308-A2.

XX PD 31-OCT-2002.

XX PF 23-APR-2002; 2002WO-US013135.

XX PR 24-APR-2001; 2001US-0286137P.

XX PA (EPIG-) EPIGENESIS PHARM INC.

XX PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-229219/22.

XX PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.

XX PS Claim 15; SEQ ID NO 549; 872pp; English.

XX CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences

XX SQ Sequence 20 BP; 2 A; 1 C; 3 G; 14 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;



QY 2779 AGAATTGAAAAA 2798  
Db 20 AAACCTGAAACAAACAAA 1

RESULT 5114  
ABZ93877/c  
ID ABZ93877 standard; DNA; 20 BP.  
XX  
AC ABZ93877;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human oligonucleotide sequence.  
XX

KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cyostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.

OS Homo sapiens.  
XX  
PN WO200285308-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013135.  
XX  
PR 24-APR-2001; 2001US-0286137P.  
XX  
PA (EPIG-) EPIGENESIS PHARM INC.

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PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
DR WPI; 2003-229219/22.

XX  
PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.

XX  
PS Disclosure; SEQ ID NO 9119; 872pp; English.

XX  
CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cyostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences

XX  
SQ Sequence 20 BP; 1 A; 3 C; 11 G; 5 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 354 CCTACCAGCAGCTGGCCTAC 373  
Db 20 CCCACCAGCACCTGGCACAC 1

RESULT 5115  
ABZ99269/c  
ID ABZ99269 standard; DNA; 20 BP.  
XX  
AC ABZ99269;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human PDE4C oligonucleotide sequence.

XX  
KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cyostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.

OS Homo sapiens.  
XX  
PN WO200285308-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013135.  
XX  
PR 24-APR-2001; 2001US-0286137P.  
XX  
PA (EPIG-) EPIGENESIS PHARM INC.

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PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
DR WPI; 2003-229219/22.

XX  
PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.

XX  
PS Disclosure; SEQ ID NO 14511; 872pp; English.

XX  
CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cyostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences

XX  
SQ Sequence 20 BP; 2 A; 7 C; 8 G; 3 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;



QY 636 ATGCCGCGGGCCTGGCCGAG 655  
||||| | | | | | | |  
Db 20 ATGCCGCGGACGTGCCCCAG 1

RESULT 5116  
ABZ88750  
ID ABZ88750 standard; DNA; 20 BP.  
XX  
AC ABZ88750;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human oligonucleotide sequence.  
XX  
KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
XX  
OS Homo sapiens.  
XX  
PN WO200285308-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013135.  
XX  
PR 24-APR-2001; 2001US-0286137P.  
XX  
PA (EPIG-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
DR WPI; 2003-229219/22.  
XX  
PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
PS Disclosure; SEQ ID NO 3992; 872pp; English.  
XX  
CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 5 A; 2 C; 3 G; 10 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 2252 AGCTTTATTTCATATTAT 2271  
||||| | | | | | | |  
Db 1 AGCTGTATTTCACAAATTGT 20

RESULT 5117  
ABZ92509  
ID ABZ92509 standard; DNA; 20 BP.  
XX  
AC ABZ92509;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human oligonucleotide sequence.  
XX  
KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
XX  
OS Homo sapiens.  
XX  
PN WO200285308-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013135.  
XX  
PR 24-APR-2001; 2001US-0286137P.  
XX  
PA (EPIG-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
DR WPI; 2003-229219/22.  
XX  
PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
PS Disclosure; SEQ ID NO 7751; 872pp; English.  
XX  
CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of ubiquinone or  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 12 A; 1 C; 1 G; 6 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 2752 TACGCTATAATAAAAGTAT 2771  
| | | | | | | | | | | | | | | |  
Db 1 TACTTGAATAAAAAAATAT 20

RESULT 5118  
ABZ92815/c  
ID ABZ92815 standard; DNA; 20 BP.  
XX  
AC ABZ92815;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human oligonucleotide sequence.  
XX  
KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
XX  
OS Homo sapiens.  
XX  
PN WO200285308-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013135.  
XX  
PR 24-APR-2001; 2001US-0286137P.  
XX  
PA (EPIG-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
DR WPI; 2003-229219/22.  
XX  
PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
PS Disclosure; SEQ ID NO 8057; 872pp; English.  
XX  
CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 1 A; 6 C; 3 G; 10 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1310 TTGGAGACGAACATACAGAA 1329  
| | | | | | | | | | | | | | | |  
Db 20 TAGGAGCCGAACAGAAAGAA 1

RESULT 5119  
ABZ98578  
ID ABZ98578 standard; DNA; 20 BP.  
XX  
AC ABZ98578;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human ICAM oligonucleotide sequence.  
XX  
KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
XX  
OS Homo sapiens.  
XX  
PN WO200285308-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013135.  
XX  
PR 24-APR-2001; 2001US-0286137P.  
XX  
PA (EPIG-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
DR WPI; 2003-229219/22.  
XX  
PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
PS Disclosure; SEQ ID NO 13820; 872pp; English.  
XX  
CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 1 A; 6 C; 13 G; 0 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 42 GGCCCGCGCGCGCGGGGCGC 61  
||| ||||| ||||| |||||  
Db 1 GGGCAGCGCGCGCGGGGCGC 20

RESULT 5120  
ABZ98645/c  
ID ABZ98645 standard; DNA; 20 BP.  
XX  
AC ABZ98645;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human tryptase a oligonucleotide sequence.  
XX  
KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
XX  
OS Homo sapiens.  
XX  
PN WO200285308-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013135.  
XX  
PR 24-APR-2001; 2001US-0286137P.  
XX  
PA (EPIG-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
DR WPI; 2003-229219/22.  
XX  
PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
PS Disclosure; SEQ ID NO 13887; 872pp; English.  
XX  
CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 3 A; 5 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 708 ACACCAGCACCTGTTGCTG 727  
||| ||||| ||||| |||||  
Db 20 ACTACCAGGACCAGTGCTG 1

RESULT 5121  
ABZ87698/c  
ID ABZ87698 standard; DNA; 20 BP.  
XX  
AC ABZ87698;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human oligonucleotide sequence.  
XX  
KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
XX  
OS Homo sapiens.  
XX  
PN WO200285308-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013135.  
XX  
PR 24-APR-2001; 2001US-0286137P.  
XX  
PA (EPIG-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
DR WPI; 2003-229219/22.  
XX  
PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
PS Disclosure; SEQ ID NO 2940; 872pp; English.  
XX  
CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of ubiquinone or  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 16 A; 4 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;



Qy 2166 TTTTITTTTTTTTTTTT 2185  
| | | | |  
Db 20 TGTTTGTTTTGTTTTT 1

RESULT 5122  
ABZ88388/c  
ID ABZ88388 standard; DNA; 20 BP.

DT 17-OCT-2003 (first entry)

DE Human oligonucleotide sequence.

Human; antisense; lung dysfunction; nasal airway dysfunction;  
antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
asthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
antisense gene therapy; respiratory; lung; adenosine sensitivity;  
adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
lung inflammation; respiratory disease; ds.

OS Homo sapiens.

PN WO200285308-A2.

PD 31-OCT-2002.

23-APR-2002; 2002WO-US013135.

PR 24-APR-2001; 2001US-0286137P.

PA (EPIG-) EPIGENESIS PHARM INC.

PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;

DR WPI; 2003-229219/22.

Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or ubiquinone.

PS Disclosure; SEQ ID NO 3630; 872bp; English.

The invention relates to a novel pharmaceutical composition, which has a first active agent comprising an oligonucleotide antisense to the initiation codon, coding region, 5' or 3' end genomic flanking regions, 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of junctions of genes encoding a polypeptide associated with lung and/or nasal airway dysfunction and a second active agent comprising an antiinflammatory steroid and ubiquinone. A composition of the invention has antiinflammatory, antiallergic, antiasthmatic, hypotensive, immunosuppressive, and cytostatic activity. The composition may have a use in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or malignant disease or condition, also for enhancing the prophylactic or therapeutic respiratory effect of an antiinflammatory steroid in a subject, for reducing or depleting levels of, or reducing sensitivity to adenosine, reducing levels of adenosine receptor, producing bronchodilation, increasing levels of ubiquinone or lung surfactant in a subject's tissue, or treating bronchoconstriction, lung inflammation, lung allergies, or a respiratory disease or condition. Note: The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from WIPO at [ftp.wipo.int/pub/published](http://ftp.wipo.int/pub/published) pct sequences

Sequence 20 BP; 5 A; 6 C; 3 G; 6 T; 0 U; 0 Other;

Query Match	0.5%;	Score 13.6;	DB 1;	Length 20;
Best Local Similarity	80.0%;	Pred. NO. 4.5e+03;		
Matches 16; Conservative	0;	Mismatches 4;	Indels 0;	Gaps 0;

Qy	2287	TAACTTGAAAAGGTAGGC	2306
Db	20	TGAAGTTGAAAAGGTAGGC	1

RESULT 5123  
ABZ80359/c  
ID ABZ80359 standard; DNA: 20 BP.

DT 28-MAY-2003 (first entry)

DE CD45 antisense PCR primer SEQ ID NO:82.

Purification; neural stem cell; NSC; undifferentiated; neurotropic;  
KW neuroprotective; antiparkinsonian; gene therapy; nervous system;  
KW central nervous system; CNS; Alzheimer's disease; parkinson's disease;  
KW acute brain injury; CNS dysfunction; tissue regeneration; tissue repair;  
KW PCR primer: ss.

OS Synthetic.

PN WO200297067-A1.

PD 05-DEC-2002.

PF 31-MAY-2002; 2002WO-AU0000700.

PR 01-JUN-2001; 2001AU-00005403.

PA (HALL-) HALL INST MEDICAL RES WALTER & ELIZA.

PI Bartlett PF, Rietze RL;

DR WPI; 2003-140465/13.

PT Generating substantially homogeneous population of undifferentiated cells  
PT from sample, by disrupting tissue sample, discriminating cells in  
PT population based on size and performing cell-surface marker-  
PT discrimination.

PS Example 10: Page 49: 90pp: English.

The present invention describes a method (M) for generating a substantially homogeneous population of undifferentiated cells (UC) from a biological sample (BS), which comprises subjecting BS or its sub-sample to tissue-disruption to provide a mixed population (MP) comprising UC, subjecting MP to a cell size-discrimination (SD) step, and simultaneously or sequentially with SD, subjecting the cell population obtained to a cell-surface marker-discrimination step. Also described: (1) a substantially homogeneous population of undifferentiated cells (I) prepared by (M); (2) a composition (II) for use in cell replacement therapy, comprising a population of substantially homogeneous population of neural stem cells (NSCs) generated by (M); and (3) a composition (III) comprising a growth factor identified using a homogeneous population of NSCs generated by (M). (I) can have neurotropic, neuroprotective and antiparkinsonian activities, and can be used in gene therapy. (M) is useful for generating a substantially homogeneous population of undifferentiated cells such as NSCs from a biological sample, and is useful for the replacement of neural or non-neural tissue in an animal. (II) is useful in cell replacement therapy in an organ such as the brain or in the nervous system, preferably central nervous system (CNS), for treating a CNS disorder such as Alzheimer's disease, Parkinson's disease, acute brain injury and CNS dysfunction. (I) is useful for the repair or regeneration of tissue. ABZ80278 to ABZ80363 represent PCR primers which are used in an example from the present invention for markers defining cell populations.

```

SQ      Sequence 20 BP; 6 A; 5 C; 4 G; 5 T; 0 U; 0 Other;
        Query Match      0.5%; Score 13.6; DB 1; Length 20;
        Best Local Similarity 80.0%; Pred. No: 4.5e+03;

```



RESULT 5126  
ABZ77107  
ID ABZ77107 standard; DNA; 20 BP.  
XX  
AC ABZ77107;  
XX  
DT 07-MAY-2003 (first entry)  
XX

DE Human stearyl-CoA desaturase phosphorothioate oligonucleotide SEQ:62.  
XX  
KW Human; stearyl-CoA desaturase; phosphorothioate; 2'-O-methoxyethyl;  
KW 2'-MOE; cardiovascular; antiarteriosclerotic; antilipaemic; cytostatic;  
KW antiinflammatory; antisense therapy; antisense oligonucleotide; tumour;  
KW abnormal lipid metabolism; abnormal cholesterol metabolism; infection;  
KW atherosclerosis; cardiovascular disease; inflammation; inhibition; ss.  
XX  
OS Homo sapiens.  
OS Synthetic.  
XX  
FH Key Location/Qualifiers  
FT modified\_base 1..20  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "phosphorothioate linkages"  
FT modified\_base 1..5  
FT /\*tag= b  
FT /mod\_base= OTHER  
FT /note= "2'-O-methoxyethyl (2'-MOE) gapmer"  
FT modified\_base 16..20  
FT /\*tag= c  
FT /mod\_base= OTHER  
FT /note= "2'-O-methoxyethyl (2'-MOE) gapmer"  
XX  
WO2003012031-A2.  
XX  
PN 13-FEB-2003.  
XX  
PD 16-JUL-2002; 2002WO-US022676.  
XX  
PF 30-JUL-2001; 2001US-00918187.  
XX  
PR (ISIS-) ISIS PHARM INC.  
XX  
PA Crooke RM, Graham MJ;  
XX  
PI WPI; 2003-248160/24.  
XX  
DR  
XX  
XX New antisense oligonucleotides targeted to nucleic acids encoding human  
PT stearyl-CoA desaturase, useful for treating diseases associated with the  
PT desaturase, e.g. atherosclerosis, and in diagnostic and research  
PT applications.  
XX  
PS Claim 3; Page 95; 117pp; English.  
XX  
CC The present invention describes a compound (I) that is 8-50 nucleobases  
CC in length targeted to a nucleic acid molecule encoding human stearyl-CoA  
CC desaturase, and which specifically hybridises with and inhibits the  
CC expression of human stearyl-CoA desaturase, or which specifically  
CC hybridises with at least an 8-nucleobase portion of an active site on a  
CC nucleic acid molecule encoding human stearyl-CoA desaturase. Human  
CC stearyl-CoA desaturase is mapped to chromosome 10. (I) has antilipaemic,  
CC cardiovascular, antiarteriosclerotic, cytostatic and antiinflammatory  
CC activities, and can be used in antisense therapy. The antisense compounds  
CC (I) can be used for modulating the expression of human stearyl-CoA  
CC desaturase and for treating diseases or conditions associated with  
CC expression of human stearyl-CoA desaturase, e.g. abnormal lipid or  
CC cholesterol metabolism, atherosclerosis, or cardiovascular diseases. The  
CC antisense compounds (I) can also be used for diagnostics, therapeutics  
CC and prophylaxis, e.g. to prevent or delay infection, inflammation or  
CC tumour formation, as research reagents and kits, and in distinguishing  
CC between functions of various members of a biological pathway. The present  
CC sequence represents a human stearyl-CoA desaturase inhibiting chimeric  
CC phosphorothioate antisense oligonucleotide, which is given in an example  
CC from the present invention  
XX  
SQ Sequence 20 BP; 7 A; 5 C; 8 G; 0 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 484 CCAGAGCCAGGAGGGAGCGG 503  
||| ||| ||| ||| ||| ||| ||| |||  
Db 1 CCCGAGCCAGGAGAGAAAGG 20  
  
RESULT 5127  
ADA26838  
ID ADA26838 standard; DNA; 20 BP.  
XX  
AC ADA26838;  
XX  
DT 20-NOV-2003 (first entry)  
XX  
DE Human ZD52F10 reverse PCR primer #122.  
XX  
KW Metastasis; neoplastic growth; detection; prediction;  
KW neoplastic growth marker; drug screening; cancer; tumour;  
KW gastrointestinal; prostate; breast; colorectal; diagnostic imaging;  
KW drug targeting; human; cytostatic; reverse transcription-PCR; RT-PCR;  
KW primer; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO2003031930-A2.  
XX  
PD 17-APR-2003.  
XX  
PF 02-OCT-2002; 2002WO-US031247.  
XX  
PR 09-OCT-2001; 2001US-0327332P.  
XX  
PA (UYJO ) UNIV JOHNS HOPKINS.  
XX  
PI Vogelstein B, Kinzler KW, Saha S, Bardelli A;  
XX  
DR WPI; 2003-393457/37.  
XX  
PT Identifying regions of neoplastic growth in a human body, useful for  
PT detecting or predicting metastasis, comprises administering to the human  
PT body an antibody or peptide that specifically binds to a protein marker  
PT of neoplastic growth.  
XX  
PS Example 2; Page 22; 42pp; English.  
XX  
CC The invention relates to methods for identifying regions of neoplastic  
CC growth in a human patient, especially for detecting or predicting  
CC metastasis. The methods involve determining whether a neoplastic growth  
CC marker protein is overexpressed, either by the use of an antibody  
CC specific for the protein, or by the use of PCR or hybridisation to detect  
CC nucleic acids encoding the marker proteins. A set of neoplastic growth  
CC markers are disclosed (SAGE (serial analysis of gene expression) tags for  
CC these are given in ADA26759-ADA26796), with protein tyrosine phosphatase  
CC type IVA member 3 (also known as PRL-3) being a preferred neoplastic  
CC growth marker. The neoplastic growth markers are specifically expressed  
CC at a higher level in metastatic cancers, compared with advanced and early  
CC stage cancers and normal cells from which the cancer is derived.  
CC Overexpression of the neoplastic growth markers is taken as an indication  
CC that the tissue has a propensity to metastasise. The invention also  
CC encompasses methods for treating a patient with an advanced or metastatic  
CC cancer, and for identifying candidate drugs for treating advanced or  
CC metastatic cancers. The methods of the invention are useful for  
CC identifying regions of neoplastic growth, for detecting or predicting  
CC metastasis, or identifying candidate drugs for treating advanced or  
CC metastatic cancers. The invention is particularly applicable to  
CC gastrointestinal, prostate, breast or colorectal cancers. Antibodies  
CC which bind to the neoplastic growth marker proteins are additionally  
CC useful for diagnostic imaging and for targeting cytotoxic or  
CC chemotherapeutic drugs. The present sequence represents a reverse  
CC transcription-PCR (RT-PCR) primer used to study the upregulation of  
CC neoplastic growth marker genes in an example of the invention.  
XX  
SQ Sequence 20 BP; 8 A; 4 C; 7 G; 1 T; 0 U; 0 Other;



RESULT 5130  
ABZ79328  
ID ABZ79328 standard; DNA; 20 BP.  
XX  
AC  
XX ABZ79328;  
DT 01-MAY-2003 (first entry)  
XX  
DE Acetyl-Coenzyme A-carboxylase-alpha gene PCR primer, SEQ ID 15.  
XX  
KW Human; enzyme; acetyl-Coenzyme A-carboxylase-alpha; ACC-alpha; cancer;  
KW breast; ovary; PCR; primer; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO2002100896-A2.  
XX  
PD 19-DEC-2002.  
XX  
PF 12-JUN-2002; 2002WO-FR002015.  
XX  
PR 13-JUN-2001; 2001FR-00007740.  
PR 05-MAR-2002; 2002FR-00002788.  
XX  
PA (CNRS ) CNRS CENT NAT RECH SCI.  
PA (UYLY-) UNIV LYON 1 BERNARD CLAUDE.  
XX  
PI Dalla Venezia NL, Magnard CM, Lenoir GM, Sinilnikova-Erard O;  
XX  
DR WPI; 2003-175165/17.  
XX  
PT In vitro diagnosis of cancer, particularly breast and ovarian cancer, or  
PT susceptibility, comprises detecting alterations in the acetyl coenzyme A-  
PT carboxylase alpha gene or protein expression.  
XX  
PS Example 1; Page 10; 56pp; French.  
XX  
CC The present invention relates to human acetyl-Coenzyme A-carboxylase-  
CC alpha (ACC-alpha; see ABZ79442), which can be used for in vitro diagnosis  
CC of cancer (or of an increased risk of developing it), by detecting ACC-  
CC alpha gene mutations or polymorphisms, or altered ACC-alpha protein  
CC expression, relative to a control population. The method is particularly  
CC used to diagnose cancer, especially of breast or ovary, or for assessing  
CC the risk of developing such cancers. The present sequence is a PCR  
CC primer, which was used in an example from the invention  
XX  
SQ Sequence 20 BP; 7 A; 5 C; 5 G; 3 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 2356 TGTATTTTAAGAAACAGTGC 2375  
Db 1 TGTACCTCAAGAAACAGGGC 20  
  
RESULT 5131  
ADA00265/C  
ID ADA00265 standard; DNA; 20 BP.  
XX  
AC ADA00265;  
XX  
DT 06-NOV-2003 (first entry)  
XX  
DE RIP 140 gene PCR primer SEQ ID NO:45.  
XX  
KW substrate; ligand; signal; ligand binding; immobilisation;  
KW gene engineering; genetic engineering; structure; biological activity;  
KW ligand-receptor binding; PCR primer; amplification; ss.  
XX  
OS Synthetic.  
OS Homo sapiens.

XX WO2003019199-A1.  
PN  
XX  
PD 06-MAR-2003.  
XX  
XX 22-AUG-2002; 2002WO-JP008444.  
PF  
XX 22-AUG-2001; 2001JP-00250974.  
PR  
XX (TAKA-) TAKARA BIO INC.  
PA  
XX Ohmi T, Kato I;  
PI  
XX WPI; 2003-290095/28.  
DR  
XX  
XX Substrates having number of ligands immobilized on predetermined regions  
PT of its surface, applicable in gene engineering for studying relationship  
PT between structures and biological activity of endocrine disrupters.  
XX  
PS Example 1; Page 43; 52pp; Japanese.  
XX  
CC The present invention describes a substrate having a number of ligands  
CC which have been immobilised onto a predetermined region of its surface,  
CC in which the region on the substrate has such a shape as to allow the  
CC concentration of signals caused by binding of the ligands to receptors in  
CC the region toward the receiver. Also described is a substrate for the  
CC immobilisation of such ligands. The substrates are applicable in gene  
CC engineering for studying relationship between structures and biological  
CC activity e.g. effect of endocrine disrupters on various genes and also in  
CC investigating the effect of hormones, drugs and other chemicals on the  
CC environment. Such substrates are highly sensitive in detecting the ligand  
CC -receptor binding, with affinity and reproducibility. The ligand-  
CC immobilised substrates can be produced in high density e.g. in microarray  
CC form to provide finely tuned results. ADA00221 to ADA00282 represent PCR  
CC primers used for amplifying genes in the exemplification of the present  
CC invention.  
XX  
SQ Sequence 20 BP; 2 A; 6 C; 3 G; 9 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 895 ACTGGCTGAAGTACAGAGGC 914  
Db 20 AATGACTGAAGCAAGAGGC 1  
  
RESULT 5132  
ABQ77167/c  
ID ABQ77167 standard; DNA; 20 BP.  
XX  
AC ABQ77167;  
XX  
DT 24-APR-2003 (first entry)  
XX  
DE Human ABCC12 exon 3/intron 3 boundary.  
XX  
KW Adenosine triphosphate (ATP)-binding cassette transporter subfamily C12;  
KW cystic fibrosis transmembrane conductance regulator; human; CFTR/MRP;  
KW multidrug resistance-like subgroup; somatic gene therapy; ABCC12;  
KW paroxysmal kinesigenic choreoathetosis; cysteinyl leukotriene;  
KW anionic drug; methotrexate; neutral drug; glutathione; glucuronate;  
KW sulphate conjugated drug; ds.  
XX  
OS Homo sapiens.  
XX  
PN WO200285943-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 05-MAR-2002; 2002WO-EP003320.  
XX



PR 05-MAR-2001; 2001US-0272759P.  
XX (AVET ) AVENTIS PHARMA SA.  
PA (USSH ) US DEPT HEALTH & HUMAN SERVICES.  
XX Rosier-Montus M, Prades C, Arnould-Reguigne I, Deneffe P, Dean M;  
PI Allikmets R;  
XX WPI; 2003-093101/08.  
DR New ATP-binding cassette transporter gene subfamily C12, ABCC12  
XX polypeptide, useful for preventing or treating paroxysmal kinesigenic  
PT choreoathetosis.  
PT Disclosure; Page 43; 122pp; English.  
XX This invention describes a novel human ABCC12 (adenosine triphosphate  
CC (ATP)-binding cassette transporter gene subfamily C12, i.e. cystic  
CC fibrosis transmembrane conductance regulator/multidrug resistance-like  
CC subgroup (CFTR/MRP) family) polypeptide and its encoding polynucleotides  
CC The polypeptide is useful for screening agonists and antagonist of the  
CC ABCC12 polypeptide. The products of the invention are useful for  
CC screening an active ingredient for preventing and treating paroxysmal  
CC kinesigenic choreoathetosis or pathologies linked to dysfunction of  
CC transport of organic anion transporters such as cysteinyl leukotriene,  
CC anionic drugs, such as methotrexate, neutral drugs conjugated to acidic  
CC ligands, such as glutathione, glucuronate or sulphate conjugated drugs  
CC and can be used for somatic gene therapy. This sequence represents a  
CC region corresponding to an exon/intron boundary from the gene encoding a  
CC human ABCC12 isoform described in the disclosure of the invention  
XX  
SQ Sequence 20 BP; 2 A; 5 C; 11 G; 2 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 613 GCTGCCCCACGCACACGCC 632  
Db ||||| ||||| ||||| |||||  
20 GCTGCCGCACTCACCGGCC 1  
RESULT 5133  
ABZ10372  
ID ABZ10372 standard; DNA; 20 BP.  
XX  
AC ABZ10372;  
XX  
DT 16-JAN-2003 (first entry)  
XX  
DE Haematopoietic cell proliferation disorder related primer SEQ ID NO:512.  
XX  
KW Human; haematopoietic cell proliferation disorder; cytostatic;  
KW gene therapy; lymphocytic leukaemia; acute myelogenous leukaemia;  
KW cytosine methylation state; probe; primer; ss.  
XX  
OS Homo sapiens.  
OS Synthetic.  
XX  
PN WO200277272-A2.  
XX  
PD 03-OCT-2002.  
XX  
PF 26-MAR-2002; 2002WO-EP003401.  
XX  
PR 26-MAR-2001; 2001US-0278333P.  
XX  
PA (EPIG-) EPIGENOMICS AG.  
XX  
PI Berlin K, Braun A, Distler J, Guetig D, Howe A, Mueller J;  
PI Olek A, Piepenbrock C, Adorjan P, Grabs G, Lesche R, Leu E;  
PI Lewin A, Lipscher E, Maier S, Model F, Mueller V, Otto T, Pelet C;  
PI Schwowe I, Ziebarth H;

XX WPI; 2003-018942/01.  
DR Detecting and differentiating between hematopoietic cell proliferative  
XX disorders, comprises contacting a target nucleic acid with a reagent that  
PT distinguishes between methylated and non-methylated CpG dinucleotides.  
PT Claim 11; Page 31; 117pp; English.  
XX  
PS The present invention describes a method for detecting and  
XX differentiating between haematopoietic cell proliferative disorders  
CC associated with at least 1 gene and/or their regulatory regions in a  
CC subject. The method comprises contacting a target nucleic acid in a  
CC biological sample obtained from the subject with at least 1 reagent,  
CC which distinguishes between methylated and non-methylated CpG  
CC dinucleotides within the target nucleic acid. ABZ09861 to ABZ11118  
CC represent specifically claimed nucleotide sequences from the present  
CC invention. Oligonucleotides from the present invention can be used; for  
CC differentiating between healthy haematopoietic cells and proliferative  
CC disorder haematopoietic cells; for differentiating between acute  
CC lymphocytic leukaemia and acute myelogenous leukaemia; as probes for  
CC determining the cytosine methylation state and/or single nucleotide  
CC polymorphisms (SNPs) of haematopoietic cell proliferation disorder  
CC related sequences and their complements; and as primers for the  
CC amplification of haematopoietic cell proliferation disorder related DNA  
CC sequences. The nucleotide sequences from the present invention can also  
CC be used for detecting a predisposition to, differentiation between  
CC subclasses, diagnosis, prognosis, treatment and/or monitoring of  
CC haematopoietic cell proliferative disorders. The present method enables a  
CC highly specific classification of haematopoietic cell proliferative  
CC disorders allowing for improved and informed treatment of patients  
XX  
SQ Sequence 20 BP; 8 A; 0 C; 9 G; 3 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 2683 GGTGAAATGGAGATTGGAA 2702  
Db || ||||| ||||| || ||  
1 GGGGAAATGGAGAAGTGTA 20  
RESULT 5134  
ABZ10249  
ID ABZ10249 standard; DNA; 20 BP.  
XX  
AC ABZ10249;  
XX  
DT 16-JAN-2003 (first entry)  
XX  
DE Haematopoietic cell proliferation disorder related primer SEQ ID NO:389.  
XX  
KW Human; haematopoietic cell proliferation disorder; cytostatic;  
KW gene therapy; lymphocytic leukaemia; acute myelogenous leukaemia;  
KW cytosine methylation state; probe; primer; ss.  
XX  
OS Homo sapiens.  
OS Synthetic.  
XX  
PN WO200277272-A2.  
XX  
PD 03-OCT-2002.  
XX  
PF 26-MAR-2002; 2002WO-EP003401.  
XX  
PR 26-MAR-2001; 2001US-0278333P.  
XX  
PA (EPIG-) EPIGENOMICS AG.  
XX  
PI Berlin K, Braun A, Distler J, Guetig D, Howe A, Mueller J;  
PI Olek A, Piepenbrock C, Adorjan P, Grabs G, Lesche R, Leu E;  
PI Lewin A, Lipscher E, Maier S, Model F, Mueller V, Otto T, Pelet C;

PI Schwope I, Ziebarth H;  
XX WPI; 2003-018942/01.  
DR Detecting and differentiating between hematopoietic cell proliferative  
XX disorders, comprises contacting a target nucleic acid with a reagent that  
PT distinguishes between methylated and non-methylated CpG dinucleotides.  
PT Claim 11; SEQ ID NO 389; 117pp; English.  
XX  
XX The present invention describes a method for detecting and  
CC differentiating between haematopoietic cell proliferative disorders  
CC associated with at least 1 gene and/or their regulatory regions in a  
CC subject. The method comprises contacting a target nucleic acid in a  
CC biological sample obtained from the subject with at least 1 reagent,  
CC which distinguishes between methylated and non-methylated CpG  
CC dinucleotides within the target nucleic acid. ABZ09861 to ABZ11118  
CC represent specifically claimed nucleotide sequences from the present  
CC invention. Oligonucleotides from the present invention can be used: for  
CC differentiating between healthy haematopoietic cells and proliferative  
CC disorder haematopoietic cells; for differentiating between acute  
CC lymphocytic leukaemia and acute myelogenous leukaemia; as probes for  
CC determining the cytosine methylation state and/or single nucleotide  
CC polymorphisms (SNPs) of haematopoietic cell proliferation disorder  
CC related sequences and their complements; and as primers for the  
CC amplification of haematopoietic cell proliferation disorder related DNA  
CC sequences. The nucleotide sequences from the present invention can also  
CC be used for detecting a predisposition to, differentiation between  
CC subclasses, diagnosis, prognosis, treatment and/or monitoring of  
CC haematopoietic cell proliferative disorders. The present method enables a  
CC highly specific classification of haematopoietic cell proliferative  
CC disorders allowing for improved and informed treatment of patients  
XX  
SQ Sequence 20 BP; 8 A; 0 C; 9 G; 3 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 2683 GGTGAAATGGAGATTGGAA 2702  
Db 1 GGGGAAATGGAGAGTGTAA 20  
  
RESULT 5135  
ADA20472  
ID ADA20472 standard; DNA; 20 BP.  
XX  
AC ADA20472;  
XX  
DT 20-NOV-2003 (first entry)  
XX  
DE Prostate tumour related gene CDC25A PCR primer #1.  
XX  
KW cytosstatic; gene therapy; genetic marker; epigenetic parameter;  
KW classification; differentiation; diagnosis; prostate tumour;  
KW prostate cancer; cytosine methylation; uracil;  
KW single nucleotide polymorphism; SNP; prostate carcinoma; ss; primer; PCR.  
XX  
OS Homo sapiens.  
XX  
PN WO2002103042-A2.  
XX  
PD 27-DEC-2002.  
XX  
PF 14-JUN-2002; 2002WO-EP006605.  
XX  
PR 14-JUN-2001; 2001DE-01028508.  
XX  
PA (EPIG-) EPIGENOMICS AG.  
XX  
PI Distler J, Model F, Adorjan P;  
XX

DR WPI; 2003-167536/16.  
XX  
PT Determining genetic and/or epigenetic parameters, useful for the  
PT classification, differentiation and/or diagnosis of prostate tumors or a  
PT predisposition to prostate cancer, comprises analyzing cytosine  
XX methylation.  
PS Example 2; Page 16; 376pp; English.  
XX  
CC The invention relates to a method of determining genetic and/or  
CC epigenetic parameters for the classification, differentiation and/or  
CC diagnosis of prostate tumors or the predisposition to prostate cancer,  
CC by analysing cytosine methylation in a sample of genomic DNA. The method  
CC comprises chemically treating unmethylated cytosine bases at the 5-  
CC position to uracil or another base, which is dissimilar to cytosine in  
CC terms of hybridization behaviour; followed by amplifying at least one  
CC fragment of the chemically pre-treated genomic DNA using sets of primer  
CC oligonucleotides and a polymerase. The oligomers or probes derived from  
CC them are useful for detecting the methylation state of all CpG  
CC dinucleotides and/or single nucleotide polymorphisms (SNPs) in a  
CC chemically pre-treated genomic DNA. They are all useful for treating  
CC prostate carcinoma. This sequence represents an oligonucleotide used to  
CC amplify a gene possibly involved in predisposition to prostate cancer  
CC which may contain methylated or unmethylated CpG dinucleotides.  
XX  
SQ Sequence 20 BP; 8 A; 0 C; 9 G; 3 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 2683 GGTGAAATGGAGATTGGAA 2702  
Db 1 GGGGAAATGGAGAGTGTAA 20  
  
RESULT 5136  
ADA20493  
ID ADA20493 standard; DNA; 20 BP.  
XX  
AC ADA20493;  
XX  
DT 20-NOV-2003 (first entry)  
XX  
DE Prostate tumour related gene DAPK1 PCR primer #2.  
XX  
KW cytosstatic; gene therapy; genetic marker; epigenetic parameter;  
KW classification; differentiation; diagnosis; prostate tumour;  
KW prostate cancer; cytosine methylation; uracil;  
KW single nucleotide polymorphism; SNP; prostate carcinoma; ss; primer; PCR.  
XX  
OS Homo sapiens.  
XX  
PN WO2002103042-A2.  
XX  
PD 27-DEC-2002.  
XX  
PF 14-JUN-2002; 2002WO-EP006605.  
XX  
PR 14-JUN-2001; 2001DE-01028508.  
XX  
PA (EPIG-) EPIGENOMICS AG.  
XX  
PI Distler J, Model F, Adorjan P;  
XX  
DR WPI; 2003-167536/16.  
XX  
PT Determining genetic and/or epigenetic parameters, useful for the  
PT classification, differentiation and/or diagnosis of prostate tumors or a  
PT predisposition to prostate cancer, comprises analyzing cytosine  
XX methylation.  
PS Example 2; Page 17; 376pp; English.  
XX

XX The invention relates to a method of determining genetic and/or  
CC epigenetic parameters for the classification, differentiation and/or  
CC diagnosis of prostate tumours or the predisposition to prostate cancer,  
CC by analysing cytosine methylation in a sample of genomic DNA. The method  
CC comprises chemically treating unmethylated cytosine bases at the 5-  
CC position to uracil or another base, which is dissimilar to cytosine in  
CC terms of hybridization behaviour; followed by amplifying at least one  
CC fragment of the chemically pre-treated genomic DNA using sets of primer  
CC oligonucleotides and a polymerase. The oligomers or probes derived from  
CC them are useful for detecting the methylation state of all CpG  
CC dinucleotides and/or single nucleotide polymorphisms (SNPs) in a  
CC chemically pre-treated genomic DNA. They are all useful for treating  
CC prostate carcinoma. This sequence represents an oligonucleotide used to  
CC amplify a gene possibly involved in predisposition to prostate cancer  
CC which may contain methylated or unmethylated CpG dinucleotides.  
XX  
SQ Sequence 20 BP; 5 A; 0 C; 6 G; 9 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 2695 ATTTGGAATTGAACTCTCTG 2714  
Db 1 ATTTGGAGTTGAAGTATTG 20  
RESULT 5137  
ADA84290  
ID ADA84290 standard; DNA; 20 BP.  
XX  
AC ADA84290;  
XX  
DT 20-NOV-2003 (first entry)  
XX  
DE Human CSNK2B PCR primer 1.  
XX  
KW renal cancer; prostate cancer; cytosine methylation;  
KW single nucleotide polymorphism; histological; cytological; ss; primer;  
KW PCR.  
XX  
OS Homo sapiens.  
XX  
PN WO2002103041-A2.  
XX  
PD 27-DEC-2002.  
XX  
PF 14-JUN-2002; 2002WO-EP006603.  
XX  
PR 14-JUN-2001; 2001DE-01028509.  
XX  
PA (EPIG-) EPIGENOMICS AG.  
XX  
PI Distler J, Model F, Adorjan P;  
XX  
DR WPI; 2003-183991/18.  
XX  
PT Method for characterizing, classifying and/or differentiating renal and  
PT prostate cancers, by analyzing the genetic and/or epigenetic parameters  
PT of genomic DNA, particularly by determining its cytosine methylation  
PT status.  
XX  
PS Example 2; Page 17; 21lpp; English.  
XX  
CC The invention relates to a novel method for characterising, classifying  
CC and/or differentiating renal and prostate cancer. The method comprises  
CC extracting genomic DNA from a biological sample, converting cytosine  
CC bases (by chemical treatment) that are unmethylated at the 5-position to  
CC uracil or another base, and amplifying at least one fragment of the  
CC chemically pre-treated genomic DNA using sets of primer oligonucleotides  
CC and a polymerase. The method is useful for detecting the cytosine  
CC methylation state and/or single nucleotide polymorphisms in genomic DNA,

CC particularly for characterising, classifying and/or differentiating renal  
CC and prostate cancers. The oligomers are useful as primer oligonucleotides  
CC for the amplification of any of the 112 DNA sequences of the invention.  
CC The set of oligomer probes is useful for detecting the cytosine  
CC methylation state and/or single nucleotide polymorphisms in any of the  
CC 112 chemically pretreated genomic DNA sequences. The method is also  
CC useful for identifying the tissue of origin of cancer cells. The method  
CC allows the classification, differentiation and/or diagnosis of cancer  
CC tissues using minute samples which would be inadequate for histological  
CC or cytological analysis. The present sequence is used in the  
CC exemplification of the invention.  
XX  
SQ Sequence 20 BP; 8 A; 0 C; 9 G; 3 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 2683 GGTGAAATGGAGATTTCGAA 2702  
Db 1 GGGGAAATGGAGAGTGTAA 20  
RESULT 5138  
ADA84294  
ID ADA84294 standard; DNA; 20 BP.  
XX  
AC ADA84294;  
XX  
DT 20-NOV-2003 (first entry)  
XX  
DE Human DBCCR1 PCR primer 1.  
XX  
KW renal cancer; prostate cancer; cytosine methylation;  
KW single nucleotide polymorphism; histological; cytological; ss; primer;  
KW PCR.  
XX  
OS Homo sapiens.  
XX  
PN WO2002103041-A2.  
XX  
PD 27-DEC-2002.  
XX  
PF 14-JUN-2002; 2002WO-EP006603.  
XX  
PR 14-JUN-2001; 2001DE-01028509.  
XX  
PA (EPIG-) EPIGENOMICS AG.  
XX  
PI Distler J, Model F, Adorjan P;  
XX  
DR WPI; 2003-183991/18.  
XX  
PT Method for characterizing, classifying and/or differentiating renal and  
PT prostate cancers, by analyzing the genetic and/or epigenetic parameters  
PT of genomic DNA, particularly by determining its cytosine methylation  
PT status.  
XX  
PS Example 2; Page 17; 21lpp; English.  
XX  
CC The invention relates to a novel method for characterising, classifying  
CC and/or differentiating renal and prostate cancer. The method comprises  
CC extracting genomic DNA from a biological sample, converting cytosine  
CC bases (by chemical treatment) that are unmethylated at the 5-position to  
CC uracil or another base, and amplifying at least one fragment of the  
CC chemically pretreated genomic DNA using sets of primer oligonucleotides  
CC and a polymerase. The method is useful for detecting the cytosine  
CC methylation state and/or single nucleotide polymorphisms in genomic DNA,  
CC particularly for characterising, classifying and/or differentiating renal  
CC and prostate cancers. The oligomers are useful as primer oligonucleotides  
CC for the amplification of any of the 112 DNA sequences of the invention.  
CC The set of oligomer probes is useful for detecting the cytosine  
CC methylation state and/or single nucleotide polymorphisms in any of the



112 chemically pretreated genomic DNA sequences. The method is also useful for identifying the tissue of origin of cancer cells. The method allows the classification, differentiation and/or diagnosis of cancer tissues using minute samples which would be inadequate for histological or cytological analysis. The present sequence is used in the exemplification of the invention.

Sequence 20 BP; 5 A; 0 C; 6 G; 9 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 2695 ATTGGGAATTGAACCTCTCTG 2714  
|||||  
Db 1 ATTGGAGTTGAAGTATTG 20

RESULT 5139  
ACA10235  
ID ACA10235 standard; DNA; 20 BP.  
XX  
AC ACA10235;  
XX  
DT 02-JUN-2003 (first entry)  
XX  
DE Human NOVX DNA PCR primer #53.  
XX  
KW Human; NOVX; PCR; ss; metabolic disorder; diabetes; infectious disease;  
KW obesity; anorexia; cancer; cardiovascular disorder; asthma; neurogenesis;  
KW neurodegenerative disorder; epilepsy; immune disorder; osteoarthritis;  
KW haematopoietic disorder; inflammatory skin disorder; dyslipidemia;  
KW haematopoiesis; wound healing; angiogenesis; bacterial infection; primer;  
KW viral infection; fungal infection; helminthic infection; atherosclerosis;  
KW protozoal infection; hypertension.

OS Homo sapiens.

XX WO200290504-A2.

XX 14-NOV-2002.

XX 02-MAY-2002; 2002WO-US014342.

PR 03-MAY-2001; 2001US-0288395P.  
PR 04-MAY-2001; 2001US-0288900P.  
PR 07-MAY-2001; 2001US-0289087P.  
PR 14-MAY-2001; 2001US-0290753P.  
PR 15-MAY-2001; 2001US-0291189P.  
PR 16-MAY-2001; 2001US-0291243P.  
PR 18-MAY-2001; 2001US-0292001P.  
PR 21-MAY-2001; 2001US-0292374P.  
PR 22-MAY-2001; 2001US-0292587P.  
PR 23-MAY-2001; 2001US-0293107P.  
PR 29-MAY-2001; 2001US-0294110P.  
PR 30-MAY-2001; 2001US-0294434P.  
PR 31-MAY-2001; 2001US-0294827P.  
PR 18-JUN-2001; 2001US-0298988P.  
PR 31-JUL-2001; 2001US-0308901P.  
PR 17-AUG-2001; 2001US-0313388P.  
PR 21-AUG-2001; 2001US-0313851P.  
PR 21-AUG-2001; 2001US-0313937P.  
PR 17-SEP-2001; 2001US-0322701P.  
PR 17-SEP-2001; 2001US-0322802P.  
PR 25-SEP-2001; 2001US-0324757P.  
PR 27-SEP-2001; 2001US-0325314P.  
PR 27-SEP-2001; 2001US-0325682P.  
PR 21-NOV-2001; 2001US-0332129P.  
PR 03-DEC-2001; 2001US-0336882P.  
PR 14-DEC-2001; 2001US-0340305P.  
PR 01-MAY-2002; 2002US-00138588.

XX (CURA-) CURAGEN CORP.

XX Alsobrook JP, Anderson DW, Boldog FL, Burgess CE, Casman SJ;  
PI Chapoval A, Edinger S, Gerlach V, Gorman L, Gunther E, Guo X;  
PI Kekuda R, Lepley DM, Li L, Liu X, Malyankar UM, Miller CE;  
PI Millet I, Padigaru M, Patturajan M, Pena CEA, Rieger DK, Shenoy SG;  
PI Shimkets RA, Spytek KA, Taupier RJ, Vernet CAM, Voss EZ;  
PI Zerhusen BD;  
XX  
DR WPI; 2003-103512/09.  
XX  
XX New isolated NOVX polypeptides and polynucleotides, useful for  
PT preventing, diagnosing or treating NOVX-associated disorders, e.g.  
PT osteoarthritis, obesity, atherosclerosis, cancer, Parkinson's disease,  
PT asthma, or infections.  
XX  
PS Example; Page 283; 340pp; English.  
XX

CC The invention relates to human NOVX polypeptides and the polynucleotides  
CC encoding them. The polypeptides, polynucleotides and antibodies that bind  
CC immunospecifically to the polypeptides are useful in the manufacture of a  
CC medicament for treating a syndrome associated with a human disease,  
CC preferably a NOVX-associated disorder. The sequences are useful for  
CC treating, preventing or diagnosing diseases such as metabolic disorders,  
CC diabetes, obesity, infectious diseases (viral, bacterial, fungal,  
CC helminthic, and protozoal), anorexia, cancer, cardiovascular disorders  
CC (e.g. hypertension, atherosclerosis), neurodegenerative disorders (e.g.  
CC Alzheimer's disease, Parkinson's disease), epilepsy, immune disorders,  
CC osteoarthritis, haematopoietic disorders, inflammatory skin disorders,  
CC asthma and various dyslipidemias. The nucleic acids and polypeptides may  
CC also be used as targets for the identification of small molecules that  
CC modulate or inhibit e.g. neurogenesis, cell differentiation, cell  
CC proliferation, haematopoiesis, wound healing and angiogenesis, and in the  
CC generation of antibodies that bind immunospecifically to NOVX substances  
CC for use in therapeutic or diagnostic methods. The nucleic acids are  
CC further used as hybridisation probes, and in chromosome mapping, tissue  
CC typing, preventive medicine and pharmacogenomics. This sequence  
CC represents a PCR primer used to amplify a human NOVX polynucleotide of  
CC the invention

XX Sequence 20 BP; 3 A; 2 C; 6 G; 9 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 4.5e+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 2396 TTATGCGTAATTTAATGGG 2415  
|||||  
Db 1 TTATGCTTGTTCATGGG 20

RESULT 5140

ABT43367

ID ABT43367 standard; DNA; 20 BP.

XX

AC ABT43367;

XX

DT 22-SEP-2003 (first entry)

XX

DE Neuroblastoma-related DNA sequence #282.

XX

KW Neuroblastoma; prognosis; ds; oligonucleotide.

XX

OS Unidentified.

XX

PN WO2002103017-A1.

XX

PD 27-DEC-2002.

XX

PF 30-MAY-2002; 2002WO-JP005295.

XX

PR 31-MAY-2001; 2001JP-00163666.

XX

PR 24-AUG-2001; 2001JP-00255260.

XX



PA (CHIB-) CHIBA PREFECTURE.  
PA (HISM ) HISAMITSU PHARM CO LTD.  
XX Nakagawara A;  
XX WPI; 2003-167523/16.  
DR  
XX Nucleic acids isolated from neuroblastoma showing enhanced expression in  
PT human neuroblastoma with good prognosis, useful in clarifying good/poor  
PT prognosis of neuroblastoma and providing genetic data.  
XX  
PS Example 5; Page 25; 444pp; Japanese.  
XX The invention comprises DNA sequences that show enhanced expression in  
CC human neuroblastoma with good prognosis. The DNA sequences of the  
CC invention are useful in clarifying good/poor prognosis of neuroblastoma.  
CC The present DNA sequence was used in the exemplification of the invention  
XX  
SQ Sequence 20 BP; 2 A; 8 C; 3 G; 7 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 1784 ACCCCATTCTTTCCTTCTCT 1803  
Db 1 ACCCCACTCTTGGGTCTCT 20  
RESULT 5141  
ABT43222  
ID ABT43222 standard; DNA; 20 BP.  
XX  
AC ABT43222;  
XX  
DT 22-SEP-2003 (first entry)  
XX  
DE Neuroblastoma-related DNA sequence #137.  
XX Neuroblastoma; prognosis; ds; oligonucleotide.  
XX  
OS Unidentified.  
XX  
PN WO2002103017-A1.  
XX  
PD 27-DEC-2002.  
XX  
PF 30-MAY-2002; 2002WO-JP005295.  
XX  
PR 31-MAY-2001; 2001JP-00163666.  
PR 24-AUG-2001; 2001JP-00255260.  
XX  
PA (CHIB-) CHIBA PREFECTURE.  
PA (HISM ) HISAMITSU PHARM CO LTD.  
XX Nakagawara A;  
PI WPI; 2003-167523/16.  
XX  
XX Nucleic acids isolated from neuroblastoma showing enhanced expression in  
PT human neuroblastoma with good prognosis, useful in clarifying good/poor  
PT prognosis of neuroblastoma and providing genetic data.  
XX  
PS Example 5; Page 24; 444pp; Japanese.  
XX The invention comprises DNA sequences that show enhanced expression in  
CC human neuroblastoma with good prognosis. The DNA sequences of the  
CC invention are useful in clarifying good/poor prognosis of neuroblastoma.  
CC The present DNA sequence was used in the exemplification of the invention  
XX  
SQ Sequence 20 BP; 2 A; 2 C; 8 G; 8 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 2311 AGCAATTGTTGCTGCTGTGT 2330  
Db 1 AGCAGTTTGGTGTGCTGTGGT 20  
RESULT 5142  
ABX34233/C  
ID ABX34233 standard; DNA; 20 BP.  
XX  
AC ABX34233;  
XX  
DT 10-FEB-2003 (first entry)  
XX  
DE Antisense oligonucleotide against human SAA4 expression, ISIS 145087.  
XX  
KW Human; ss; antisense; serum amyloid A4; SAA4; lipoprotein;  
KW apolipoprotein; high density lipoprotein; HDL; amyloid A; amyloid fibril;  
KW amyloidosis; inhibition; antagonist; diagnosis; antisense therapy;  
KW tumour formation; inflammatory disorder; rheumatoid arthritis;  
KW familial Mediterranean fever.  
XX  
OS Homo sapiens.  
OS Synthetic.  
XX  
PN US6455308-B1.  
XX  
PD 24-SEP-2002.  
XX  
PF 01-AUG-2001; 2001US-00920672.  
XX  
PR 01-AUG-2001; 2001US-00920672.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Freier SM;  
XX WPI; 2003-066237/06.  
DR  
XX  
PT New antisense compounds, useful for inhibiting the expression of serum  
PT amyloid A4, and for diagnosing, preventing or treating diseases  
PT associated with expression of serum amyloid A4, e.g. tumor formation or  
PT inflammatory disorders.  
XX  
PS Example 15; Col 45-46; 42pp; English.  
XX  
CC The invention discloses antisense oligonucleotides that specifically  
CC hybridise with a region encoding human serum amyloid A4 (SAA4) and  
CC inhibit its expression. Lipoproteins are globular, micelle-like particles  
CC which have been classified into five categories. The protein components  
CC of lipoproteins are known as apolipoproteins, and one family of these are  
CC the serum amyloid protein (HDL) and act as precursors of the amyloid A  
CC high density lipoprotein (HDL) and act as precursors of the amyloid A  
CC proteins found in amyloid fibril deposits formed during the process of  
CC amyloidosis. The antisense compounds and methods are useful for  
CC modulating, (i.e. inhibiting) the expression of serum amyloid A4  
CC (antagonists). The compounds are also useful for diagnosing, preventing  
CC and treating (using antisense therapy) diseases associated with elevated  
CC expression of serum amyloid A4, e.g. tumour formation or inflammatory  
CC disorders such as rheumatoid arthritis and familial Mediterranean fever.  
CC The antisense compounds can also be used as research reagents and  
CC diagnostics, or as tools in differential and/or combinatorial analyses to  
CC elucidate expression patterns of a portion or the entire complement of  
CC genes expressed within cells or tissues. The sequences presented in  
CC ABX34211-ABX34288 are the antisense oligonucleotides which are directed  
CC against human SAA4 expression. Each antisense oligonucleotide has a  
CC phosphorothioate backbone, all cytidines residues are 5-methylcytidines  
CC and bases 1-5 and 16-20 are 2-methoxyethyl (2'-MOE) nucleotides  
XX  
SQ Sequence 20 BP; 6 A; 7 C; 4 G; 3 T; 0 U; 0 Other;



XX OS Unidentified.  
XX PN WO2003020916-A2.  
XX PD 13-MAR-2003.  
XX PF 28-MAR-2002; 2002WO-US009663.  
XX PR 29-AUG-2001; 2001US-0315529P.  
XX PA (UYWY-) UNIV WYOMING.  
XX PI Lewis RV, Hayashi CY, Gatesy JE, Motriuk D;  
XX WPI; 2003-290190/28.  
XX PT Novel spider silk protein e.g. major ampullate spidroin 2-like,  
PT flagelliform (Flag)-like spider silk proteins, useful for producing  
PT fabric, sutures, medical coverings, high-tech clothing, rope.  
XX PS Example 1; Page 42; 99pp; English.  
XX CC The invention relates to novel spider silk proteins e.g. major ampullate  
CC spidroin 1-like (MasP1) spider silk protein; major ampullate spidroin 2-  
CC like (MasP2) spider silk protein, flagelliform (Flag)-like spider silk  
CC proteins and spider silk proteins comprising atypical repetitive motifs.  
CC Sequences of the invention are useful for producing fabrics, sutures,  
CC medical coverings, high-tech clothing, rope and reinforced plastics. They  
CC are used to make high-tech clothing, rope, sails, parachutes, wings on  
CC aerial devices (e.g. hand gliders), flexible tie downs for electrical  
CC components, sutures and as biomaterials for implantation (e.g. artificial  
CC ligaments or aortic banding). Biomedical applications of the spider silk  
CC fibers involve use of natural and/or synthetic spider silk fibers in  
CC sutures used in surgical procedures, including eye surgery, vascular  
CC closure, bowel surgery, cosmetic surgery, reconstructive surgery (e.g.  
CC nerve or tympanic membrane reconstruction) and central nervous system  
CC surgery. Natural and synthetic spider silk fibers are also used in the  
CC generation of antibiotic impregnated sutures and implant material and  
CC matrix material for reconstruction of bone and connective tissue. Spider  
CC silk proteins can be modified to alter various physical properties of  
CC fibroin and different spider silk proteins. Synthetic spider silk fibers  
CC may be mixed with various plastics and/or resins to prepare a fiber-  
CC reinforced plastic and/or resin product. They are useful as structural  
CC reinforcement material in thermal injected plastics. The present sequence  
CC is major ampullate spidroin 2 (MasP2) DNA amplifying PCR primer used in  
CC the exemplification of the invention  
XX Sequence 20 BP; 7 A; 4 C; 7 G; 2 T; 0 U; 0 Other;  
SQ Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 24 CAGTGACCCGGACAGCAAGG 43  
Db 1 CAAGGATCTGGACAGCAAGG 20  
RESULT 5146  
AAL53961  
ID AAL53961 standard; DNA; 20 BP.  
XX AC AAL53961;  
XX DT 18-FEB-2003 (first entry)  
XX DE DNA mutation detection related ribonucleotide, SEQ ID No 11.  
XX KW Detecting; point mutation; hybridising; target DNA; duplex; RNase H;  
XX KW single nucleotide polymorphism; ss.  
XX OS Unidentified.

XX PN US2002142308-A1.  
XX PD 03-OCT-2002.  
XX PF 30-MAR-2001; 2001US-00823634.  
XX PR 30-MAR-2001; 2001US-00823634.  
XX PA (DATE/) DATTA GUPTA N.  
XX PA (TSEN/) TSENG T.  
XX PI Dattagupta N, Tseng T;  
XX WPI; 2003-102506/09.  
XX PT Detecting point mutation in DNA strand, by hybridizing target DNA strand  
PT having mutation with test DNA strand to form duplex, contacting the  
PT duplex with RNase H and determining the cleavage of test strand by RNase  
PT H.  
XX PS Example 4; Fig 3; 26pp; English.  
XX CC The invention relates to a novel method for detecting a point mutation in  
CC a DNA strand. The novel method comprises hybridising a target DNA strand  
CC containing or suspected of containing a point mutation with a test  
CC nucleic acid strand complementary to the DNA strand to form a target DNA  
CC strand/test nucleic acid strand duplex, contacting the duplex with an  
CC RNase H, and determining whether the ribonucleotide residues within the  
CC nucleotide sequence are cleaved by RNase H. The method is useful for  
CC detecting a point mutation in a DNA strand, where the point mutation to  
CC be detected is a single nucleotide polymorphism, preferably a  
CC polymorphism in a genome, e.g., a viral, bacterial, eukaryotic, mammalian  
CC or human genome. The method is useful to detect any nucleic acids from  
CC any species of organisms such as Acinetobacter, Bacillus, Candida,  
CC Enterococcus, Haemophilus, Mycobacterium and Streptococcus, and viruses.  
CC This polynucleotide sequence represents a ribonucleotide relating to the  
CC mutation detecting method of the invention  
XX Sequence 20 BP; 4 A; 0 C; 0 G; 16 T; 0 U; 0 Other;  
SQ Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 2155 TTTTCTCTCCTTTTCTTTT 2174  
Db 1 TTTTCTCTCCTTTTCTTTT 20  
RESULT 5147  
AAL53959  
ID AAL53959 standard; DNA; 20 BP.  
XX AC AAL53959;  
XX DT 18-FEB-2003 (first entry)  
XX DE DNA mutation detection related ribonucleotide, SEQ ID No 9.  
XX KW Detecting; point mutation; hybridising; target DNA; duplex; RNase H;  
XX KW single nucleotide polymorphism; ss.  
XX OS Unidentified.  
XX PN US2002142308-A1.  
XX PD 03-OCT-2002.  
XX PF 30-MAR-2001; 2001US-00823634.  
XX PR 30-MAR-2001; 2001US-00823634.

PA (DATT/) DATTAGUPTA N.  
PA (TSEN/) TSENG T.  
XX  
PI Dattagupta N, Tseng T;  
XX  
DR WPI; 2003-102506/09.  
XX  
XX Detecting point mutation in DNA strand, by hybridizing target DNA strand  
PT having mutation with test DNA strand to form duplex, contacting the  
PT duplex with RNase H and determining the cleavage of test strand by RNase  
PT H.  
XX  
PS Example 4; Fig 3; 26pp; English.  
XX  
XX The invention relates to a novel method for detecting a point mutation in  
CC a DNA strand. The novel method comprises hybridising a target DNA strand  
CC containing or suspected of containing a point mutation with a test  
CC nucleic acid strand complementary to the DNA strand to form a target DNA  
CC strand/test nucleic acid strand duplex, contacting the duplex with an  
CC RNase H, and determining whether the ribonucleotide residues within the  
CC nucleotide sequence are cleaved by RNase H. The method is useful for  
CC detecting a point mutation in a DNA strand, where the point mutation to  
CC be detected is a single nucleotide polymorphism, preferably a  
CC polymorphism in a genome, e.g., a viral, bacterial, eukaryotic, mammalian  
CC or human genome. The method is useful to detect any nucleic acids from  
CC any species of organisms such as Acintobacter, Bacillus, Candida,  
CC Enterococcus, Haemophilus, Mycobacterium and Streptococcus, and viruses.  
CC This polynucleotide sequence represents a ribonucleotide relating to the  
CC mutation detecting method of the invention  
XX  
SQ Sequence 20 BP; 4 A; 0 C; 0 G; 16 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 2155 TTTTCTCTCCTTTT 2174  
Db ||||| |||||  
1 TTTTAAATTTT 20  
  
RESULT 5148  
AAL53967/c  
ID AAL53967 standard; DNA; 20 BP.  
XX  
AC AAL53967;  
XX  
DT 18-FEB-2003 (first entry)  
XX  
DE DNA mutation detection related ribonucleotide, SEQ ID No 17.  
XX  
KW Detecting; point mutation; hybridising; target DNA; duplex; RNase H;  
KW single nucleotide polymorphism; ss.  
XX  
OS Unidentified.  
XX  
PN US2002142308-A1.  
XX  
PD 03-OCT-2002.  
XX  
PF 30-MAR-2001; 2001US-00823634.  
XX  
PR 30-MAR-2001; 2001US-00823634.  
XX  
PA (DATT/) DATTAGUPTA N.  
PA (TSEN/) TSENG T.  
XX  
PI Dattagupta N, Tseng T;  
XX  
DR WPI; 2003-102506/09.  
XX  
XX Detecting point mutation in DNA strand, by hybridizing target DNA strand  
PT having mutation with test DNA strand to form duplex, contacting the  
PT

PT duplex with RNase H and determining the cleavage of test strand by RNase  
PT H.  
XX  
PS Example 5; Fig 4; 26pp; English.  
XX  
XX The invention relates to a novel method for detecting a point mutation in  
CC a DNA strand. The novel method comprises hybridising a target DNA strand  
CC containing or suspected of containing a point mutation with a test  
CC nucleic acid strand complementary to the DNA strand to form a target DNA  
CC strand/test nucleic acid strand duplex, contacting the duplex with an  
CC RNase H, and determining whether the ribonucleotide residues within the  
CC nucleotide sequence are cleaved by RNase H. The method is useful for  
CC detecting a point mutation in a DNA strand, where the point mutation to  
CC be detected is a single nucleotide polymorphism, preferably a  
CC polymorphism in a genome, e.g., a viral, bacterial, eukaryotic, mammalian  
CC or human genome. The method is useful to detect any nucleic acids from  
CC any species of organisms such as Acintobacter, Bacillus, Candida,  
CC Enterococcus, Haemophilus, Mycobacterium and Streptococcus, and viruses.  
CC This polynucleotide sequence represents a ribonucleotide relating to the  
CC mutation detecting method of the invention  
XX  
SQ Sequence 20 BP; 16 A; 1 C; 0 G; 3 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 1758 TTATTCATTAAAGCTTTT 1777  
Db ||||| |||||  
20 TTTTAAAGATTTT 1  
  
RESULT 5149  
AAL53958  
ID AAL53958 standard; DNA; 20 BP.  
XX  
AC AAL53958;  
XX  
DT 18-FEB-2003 (first entry)  
XX  
DE DNA mutation detection related ribonucleotide, SEQ ID No 8.  
XX  
KW Detecting; point mutation; hybridising; target DNA; duplex; RNase H;  
KW single nucleotide polymorphism; ss.  
XX  
OS Unidentified.  
XX  
PN US2002142308-A1.  
XX  
PD 03-OCT-2002.  
XX  
PF 30-MAR-2001; 2001US-00823634.  
XX  
PR 30-MAR-2001; 2001US-00823634.  
XX  
PA (DATT/) DATTAGUPTA N.  
PA (TSEN/) TSENG T.  
XX  
PI Dattagupta N, Tseng T;  
XX  
DR WPI; 2003-102506/09.  
XX  
XX Detecting point mutation in DNA strand, by hybridizing target DNA strand  
PT having mutation with test DNA strand to form duplex, contacting the  
PT duplex with RNase H and determining the cleavage of test strand by RNase  
PT H.  
XX  
PS Example 4; Fig 3; 26pp; English.  
XX  
XX The invention relates to a novel method for detecting a point mutation in  
CC a DNA strand. The novel method comprises hybridising a target DNA strand  
CC containing or suspected of containing a point mutation with a test  
CC nucleic acid strand complementary to the DNA strand to form a target DNA  
CC strand/test nucleic acid strand duplex, contacting the duplex with an  
CC RNase H, and determining whether the ribonucleotide residues within the  
CC nucleotide sequence are cleaved by RNase H. The method is useful for  
CC detecting a point mutation in a DNA strand, where the point mutation to  
CC be detected is a single nucleotide polymorphism, preferably a  
CC polymorphism in a genome, e.g., a viral, bacterial, eukaryotic, mammalian  
CC or human genome. The method is useful to detect any nucleic acids from  
CC any species of organisms such as Acintobacter, Bacillus, Candida,  
CC Enterococcus, Haemophilus, Mycobacterium and Streptococcus, and viruses.  
CC This polynucleotide sequence represents a ribonucleotide relating to the  
CC mutation detecting method of the invention  
XX



CC strand/test nucleic acid strand duplex, contacting the duplex with an  
CC RNase H, and determining whether the ribonucleotide residues within the  
CC nucleotide sequence are cleaved by RNase H. The method is useful for  
CC detecting a point mutation in a DNA strand, where the point mutation to  
CC be detected is a single nucleotide polymorphism, preferably a  
CC polymorphism in a genome, e.g., a viral, bacterial, eukaryotic, mammalian  
CC or human genome. The method is useful to detect any nucleic acids from  
CC any species of organisms such as Acintobacter, Bacillus, Candida,  
CC Enterococcus, Haemophilus, Mycobacterium and Streptococcus, and viruses.  
CC This polynucleotide sequence represents a ribonucleotide relating to the  
CC mutation detecting method of the invention  
XX  
SQ Sequence 20 BP; 4 A; 0 C; 0 G; 16 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 2155 TTTTTCCTCCTTTTTTTT 2174  
|||||  
Db 1 TTTTTTTAAATTTTTTTT 20

RESULT 5150  
AAL53962/C  
ID AAL53962 standard; DNA; 20 BP.

XX AAL53962;

XX 18-FEB-2003 (first entry)

DE DNA mutation detection related oligo, SEQ ID No 12.

KW Detecting; point mutation; hybridising; target DNA; duplex; RNase H;  
KW single nucleotide polymorphism; ss.

XX Unidentified.

XX US2002142308-A1.

XX 03-OCT-2002.

XX 30-MAR-2001; 2001US-00823634.

XX 30-MAR-2001; 2001US-00823634.

XX (DATT/) DATTAGUPTA N.  
XX (TSEN/) TSENG T.

XX Dattagupta N, Tseng T;

XX WPI; 2003-102506/09.

XX Detecting point mutation in DNA strand, by hybridizing target DNA strand  
PT having mutation with test DNA strand to form duplex, contacting the  
PT duplex with RNase H and determining the cleavage of test strand by RNase  
PT H.

PS Example 4; Fig 3; 26pp; English.

XX The invention relates to a novel method for detecting a point mutation in  
CC a DNA strand. The novel method comprises hybridising a target DNA strand  
CC containing or suspected of containing a point mutation with a test  
CC nucleic acid strand complementary to the DNA strand to form a target DNA  
CC strand/test nucleic acid strand duplex, contacting the duplex with an  
CC RNase H, and determining whether the ribonucleotide residues within the  
CC nucleotide sequence are cleaved by RNase H. The method is useful for  
CC detecting a point mutation in a DNA strand, where the point mutation to  
CC be detected is a single nucleotide polymorphism, preferably a  
CC polymorphism in a genome, e.g., a viral, bacterial, eukaryotic, mammalian  
CC or human genome. The method is useful to detect any nucleic acids from  
CC any species of organisms such as Acintobacter, Bacillus, Candida,  
CC Enterococcus, Haemophilus, Mycobacterium and Streptococcus, and viruses.

CC This polynucleotide sequence represents an oligo relating to the mutation  
CC detecting method of the invention  
XX  
SQ Sequence 20 BP; 16 A; 0 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 2166 TTTTTCCTCCTTTTTTTT 2185  
|||||  
Db 20 TTTTTCCTCCTTTTTTTT 1

RESULT 5151

AAL53960

ID AAL53960 standard; DNA; 20 BP.

XX AAL53960;

XX 18-FEB-2003 (first entry)

DE DNA mutation detection related ribonucleotide, SEQ ID No 10.

KW Detecting; point mutation; hybridising; target DNA; duplex; RNase H;  
KW single nucleotide polymorphism; ss.

XX Unidentified.

XX US2002142308-A1.

XX 03-OCT-2002.

XX 30-MAR-2001; 2001US-00823634.

XX 30-MAR-2001; 2001US-00823634.

XX (DATT/) DATTAGUPTA N.  
XX (TSEN/) TSENG T.

XX Dattagupta N, Tseng T;

XX WPI; 2003-102506/09.

XX Detecting point mutation in DNA strand, by hybridizing target DNA strand  
PT having mutation with test DNA strand to form duplex, contacting the  
PT duplex with RNase H and determining the cleavage of test strand by RNase  
PT H.

PS Example 4; Fig 3; 26pp; English.

XX The invention relates to a novel method for detecting a point mutation in  
CC a DNA strand. The novel method comprises hybridising a target DNA strand  
CC containing or suspected of containing a point mutation with a test  
CC nucleic acid strand complementary to the DNA strand to form a target DNA  
CC strand/test nucleic acid strand duplex, contacting the duplex with an  
CC RNase H, and determining whether the ribonucleotide residues within the  
CC nucleotide sequence are cleaved by RNase H. The method is useful for  
CC detecting a point mutation in a DNA strand, where the point mutation to  
CC be detected is a single nucleotide polymorphism, preferably a  
CC polymorphism in a genome, e.g., a viral, bacterial, eukaryotic, mammalian  
CC or human genome. The method is useful to detect any nucleic acids from  
CC any species of organisms such as Acintobacter, Bacillus, Candida,  
CC Enterococcus, Haemophilus, Mycobacterium and Streptococcus, and viruses.  
CC This polynucleotide sequence represents a ribonucleotide relating to the  
CC mutation detecting method of the invention

XX Sequence 20 BP; 4 A; 0 C; 0 G; 16 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 2155 TTTTCTCTCCCTTTTTTTT 2174  
DB 1 TTTTATAAAATTTTTTTTTT 20

RESULT 5152  
AAL53964/c  
ID AAL53964 standard; DNA; 20 BP.

RESULT 5153  
AAL53966/C  
ID AAL53966 standard: DNA: 20 BP.

AC AAL53966;  
XX  
XX 18-FEB-2003 (first entry)  
XX  
DE DNA mutation detection related oligo, SEQ ID No 16.

RESULT 5154  
ABT32534  
ID ABT32534 standard; DNA: 20 BP.

Query Match	0.5%;	Score 13.6;	DB 1;	Length 20;
Best Local Similarity	80.0%;	Pred. No. 4.5e+03;		
Matches 16;	Conservative	0;	Mismatches 4;	Indels 0; Gaps 0;

OS Unidentified.  
XX WO200297093-A1.  
PN  
XX 05-DEC-2002.  
XX  
XX 30-MAY-2002; 2002WO-JP005294.  
PF  
XX 30-MAY-2001; 2001JP-00162775.  
PR  
XX 24-AUG-2001; 2001JP-00255226.  
XX  
XX (CHIB-) CHIBA PREFECTURE.  
PA (HISM ) HISAMITSU PHARM CO LTD.  
XX  
XX Nakagawara A;  
PI  
XX WPI; 2003-140476/13.  
DR  
XX Nucleic acids having higher expression in human neuroblastoma with poor prognosis for diagnostic prediction of neuroblastoma prognosis.  
PT  
XX Example 5; Page 28; 111pp; Japanese.  
PS  
XX The invention comprises nucleic acids that show increased expression in human neuroblastomas with poor prognosis over those with a good prognosis. The nucleic acids of the invention are useful as a tool for distinguishing neuroblastomas with a favourable prognosis (spontaneous regression) from neuroblastomas with a poor prognosis (high malignancy).  
CC The DNA sequences ABT32224 - ABT32571 represent oligonucleotides used in an example of the invention  
CC  
XX Sequence 20 BP; 2 A; 8 C; 3 G; 7 T; 0 U; 0 Other;  
SQ  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 1784 ACCCCATTCTTTCCTTCTCT 1803  
DB 1 ACCCCACTCTTTGGGTCTCT 20  
RESULT 5155  
ABT32356  
ID ABT32356 standard; DNA; 20 BP.  
XX  
AC ABT32356;  
XX  
DT 08-MAY-2003 (first entry)  
XX  
DE Neuroblastoma-related oligonucleotide #133.  
XX  
KW Neuroblastoma; prognosis; spontaneous regression; primer; probe; ds;  
KW high malignancy.  
XX  
OS Unidentified.  
XX  
PN WO200297093-A1.  
XX  
PD 05-DEC-2002.  
XX  
PF 30-MAY-2002; 2002WO-JP005294.  
XX  
PR 30-MAY-2001; 2001JP-00162775.  
PR 24-AUG-2001; 2001JP-00255226.  
XX  
XX (CHIB-) CHIBA PREFECTURE.  
PA (HISM ) HISAMITSU PHARM CO LTD.  
XX  
XX Nakagawara A;  
PI  
XX WPI; 2003-140476/13.  
DR  
XX

PT Nucleic acids having higher expression in human neuroblastoma with poor prognosis for diagnostic prediction of neuroblastoma prognosis.  
XX  
PS Example 5; Page 27; 111pp; Japanese.  
XX  
CC The invention comprises nucleic acids that show increased expression in human neuroblastomas with poor prognosis over those with a good prognosis. The nucleic acids of the invention are useful as a tool for distinguishing neuroblastomas with a favourable prognosis (spontaneous regression) from neuroblastomas with a poor prognosis (high malignancy).  
CC The DNA sequences ABT32224 - ABT32571 represent oligonucleotides used in an example of the invention  
CC  
XX Sequence 20 BP; 2 A; 2 C; 8 G; 8 T; 0 U; 0 Other;  
SQ  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 2311 AGCAATTGTTGCTGCTTGT 2330  
DB 1 AGCAGTTTGGTCTGCTTGT 20  
RESULT 5156  
AAL61847/c  
ID AAL61847 standard; DNA; 20 BP.  
XX  
AC AAL61847;  
XX  
DT 22-SEP-2003 (first entry)  
XX  
DE Human ETBR-LP-2 antisense oligonucleotide ISIS #204273.  
XX  
KW Human; G protein-coupled receptor; hyperproliferative disorder; GPR37L1; endothelin type b receptor-like protein-2; cerebral vascular disease; antisense; endothelin-binding receptor-like protein-2; atherosclerosis; cardiovascular disease; ETBR-LP-2; G-protein coupled receptor 37 like 1; acute proliferative nephropathy; ETBR-like protein 2; cancer; stroke; angiogenesis; hypertension; phosphorothioate; ss.  
XX  
OS Homo sapiens.  
OS Synthetic.  
XX  
XX Key Location/Qualifiers  
FT modified\_base 1..20  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "Phosphorothioate backbone; All cytidine residues are 5-methylcytidines"  
FT modified\_base 1..5  
FT /\*tag= b  
FT /mod\_base= OTHER  
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"  
FT modified\_base 16..20  
FT /\*tag= c  
FT /mod\_base= OTHER  
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"  
XX  
PN WO2003050244-A2.  
XX  
PD 19-JUN-2003.  
XX  
PF 04-DEC-2002; 2002WO-US038520.  
XX  
PR 06-DEC-2001; 2001US-00003126.  
XX  
XX (ISIS-) ISIS PHARM INC.  
PA  
XX Monia BP, Freier SM;  
XX  
DR WPI; 2003-558997/52.  
XX

PT New oligonucleotides which bind the nucleic acid encoding the G protein  
PT coupled receptor ETBR-LP-2 (endothelin type b receptor-like protein-2  
PT receptor), useful for treating e.g. cancer and cardiovascular diseases.  
XX  
PS Example 15; Page 80; 106pp; English.  
XX  
CC The invention relates to antisense compounds targetted to the nucleic  
CC acid encoding the G protein-coupled receptor ETBR-LP-2 (endothelin type b  
CC receptor-like protein-2) to inhibit its expression. ETBR-LP-2 is also  
CC known as endothelin-binding receptor-like protein-2, ETBR-like protein 2  
CC and G-protein coupled receptor 37 like 1 (GPR37L1). Antisense compounds  
CC of the invention are useful for treating hyperproliferative disorders  
CC (especially cancer) and cardiovascular diseases especially angiogenesis,  
CC atherosclerosis, hypertension, cerebral vascular disease, stroke and  
CC acute proliferative nephropathy. The present sequence is an antisense  
CC oligonucleotide targetted to human ETBR-LP-2 DNA  
XX  
SQ Sequence 20 BP; 4 A; 5 C; 9 G; 2 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 250 GGTCCCCCACCTCTCTCCG 269  
Db 20 GTGGCCTACCTCTCCACCG 1  
RESULT 5157  
ACD99656/c  
ID ACD99656 standard; DNA; 20 BP.  
XX  
AC ACD99656;  
XX  
DT 25-SEP-2003 (first entry)  
XX  
DE Immunostimulatory nucleic acid #342.  
XX  
KW Immunostimulatory; antiinflammatory; dermatological; antipsoriatic;  
KW antiulcer; gene therapy; vaccine; non-allergic inflammatory disease;  
KW psoriasis; eczema; allergic contact dermatitis; latex dermatitis;  
KW inflammatory bowel disease; ulcerative colitis; Crohn's disease; ss.  
XX  
OS Synthetic.  
XX  
PN US2003050268-A1.  
XX  
PD 13-MAR-2003.  
XX  
DT 25-SEP-2003 (first entry)  
XX  
DE Immunostimulatory nucleic acid #342.  
XX  
KW Immunostimulatory; antiinflammatory; dermatological; antipsoriatic;  
KW antiulcer; gene therapy; vaccine; non-allergic inflammatory disease;  
KW psoriasis; eczema; allergic contact dermatitis; latex dermatitis;  
KW inflammatory bowel disease; ulcerative colitis; Crohn's disease; ss.  
XX  
OS Synthetic.  
XX  
PN US2003050268-A1.  
XX  
PD 13-MAR-2003.  
XX  
PF 29-MAR-2002; 2002US-00112653.  
XX  
PR 29-MAR-2001; 2001US-0279642P.  
XX  
PA (KRIE/) KRIEG A M.  
PA (BERG/) BERG D J.  
XX  
PI Krieg AM, Berg DJ;  
XX  
DR WPI; 2003-521815/49.  
XX  
PT Treating non-allergic inflammatory diseases, such as psoriasis, eczema,  
PT allergic contact dermatitis, latex dermatitis or inflammatory bowel  
PT disease by administering an immunostimulatory nucleic acid.  
XX  
PS Disclosure; Page 18; 229pp; English.  
XX  
CC The invention describes a method of treating non-allergic inflammatory  
CC disease comprising administering to a subject having or at risk of  
CC developing a non-allergic inflammatory disease an immunostimulatory  
CC nucleic acid for prevention or treatment of the disease. The method is  
CC useful for treating non-allergic inflammatory diseases, such as  
CC psoriasis, eczema, allergic contact dermatitis, latex dermatitis or  
CC inflammatory bowel disease e.g., ulcerative colitis or Crohn's disease.  
XX

CC This sequence represents an immunostimulatory nucleic acid  
XX  
SQ Sequence 20 BP; 2 A; 8 C; 2 G; 8 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 1543 AGACTAGGGAAGGAACAGGA 1562  
Db 20 AGACTGAGGAAGGAAGGA 1  
RESULT 5158  
ACH03114  
ID ACH03114 standard; DNA; 20 BP.  
XX  
AC ACH03114;  
XX  
DT 25-SEP-2003 (first entry)  
XX  
DE Immunostimulatory nucleic acid #749.  
XX  
KW Immunostimulatory; antiinflammatory; dermatological; antipsoriatic;  
KW antiulcer; gene therapy; vaccine; non-allergic inflammatory disease;  
KW psoriasis; eczema; allergic contact dermatitis; latex dermatitis;  
KW inflammatory bowel disease; ulcerative colitis; Crohn's disease; ss.  
XX  
OS Synthetic.  
XX  
PN US2003050268-A1.  
XX  
PD 13-MAR-2003.  
XX  
PF 29-MAR-2002; 2002US-00112653.  
XX  
PR 29-MAR-2001; 2001US-0279642P.  
XX  
PA (KRIE/) KRIEG A M.  
PA (BERG/) BERG D J.  
XX  
PI Krieg AM, Berg DJ;  
XX  
DR WPI; 2003-521815/49.  
XX  
PT Treating non-allergic inflammatory diseases, such as psoriasis, eczema,  
PT allergic contact dermatitis, latex dermatitis or inflammatory bowel  
PT disease by administering an immunostimulatory nucleic acid.  
XX  
PS Disclosure; Page 29; 229pp; English.  
XX  
CC The invention describes a method of treating non-allergic inflammatory  
CC disease comprising administering to a subject having or at risk of  
CC developing a non-allergic inflammatory disease an immunostimulatory  
CC nucleic acid for prevention or treatment of the disease. The method is  
CC useful for treating non-allergic inflammatory diseases, such as  
CC psoriasis, eczema, allergic contact dermatitis, latex dermatitis or  
CC inflammatory bowel disease e.g., ulcerative colitis or Crohn's disease.  
XX  
SQ Sequence 20 BP; 13 A; 2 C; 2 G; 3 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 1966 AATATTTACCTTGAAAAA 1985  
Db 1 AAAATCAACGTTGAAAAA 20  
RESULT 5159  
ACD99816/c



ID ACD99816 standard; DNA; 20 BP.  
XX  
AC ACD99816;  
XX  
DT 25-SEP-2003 (first entry)  
XX  
DE Immunostimulatory nucleic acid #502.  
XX  
KW Immunostimulatory; antiinflammatory; dermatological; antipsoriatic;  
KW antiulcer; gene therapy; vaccine; non-allergic inflammatory disease;  
KW psoriasis; eczema; allergic contact dermatitis; latex dermatitis;  
KW inflammatory bowel disease; ulcerative colitis; Crohn's disease; ss.  
XX  
OS Synthetic.  
XX  
PN US2003050268-A1.  
XX  
PD 13-MAR-2003.  
XX  
PF 29-MAR-2002; 2002US-00112653.  
XX  
PR 29-MAR-2001; 2001US-0279642P.  
XX  
PA (KRIE/) KRIEG A M.  
PA (BERG/) BERG D J.  
XX  
PI Krieg AM, Berg DJ;  
XX  
DR WPI; 2003-521815/49.  
XX  
PT Treating non-allergic inflammatory diseases; such as psoriasis, eczema,  
PT allergic contact dermatitis, latex dermatitis or inflammatory bowel  
PT disease by administering an immunostimulatory nucleic acid.  
XX  
PS Disclosure; Page 22; 229pp; English.  
XX  
CC The invention describes a method of treating non-allergic inflammatory  
CC disease comprising administering to a subject having or at risk of  
CC developing a non-allergic inflammatory disease an immunostimulatory  
CC nucleic acid for prevention or treatment of the disease. The method is  
CC useful for treating non-allergic inflammatory diseases, such as  
CC psoriasis, eczema, allergic contact dermatitis, latex dermatitis or  
CC inflammatory bowel disease e.g., ulcerative colitis or Crohn's disease.  
CC This sequence represents an immunostimulatory nucleic acid  
XX  
SQ Sequence 20 BP; 12 A; 3 C; 2 G; 3 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 1776 TTTTGTGAACCCCATCTTT 1795  
Db 20 TTTTGTGAACGTCATGTTT 1  
RESULT 5160  
ACH03191/c  
ID ACH03191 standard; DNA; 20 BP.  
XX  
AC ACH03191;  
XX  
DT 25-SEP-2003 (first entry)  
XX  
DE Immunostimulatory nucleic acid #826.  
XX  
KW Immunostimulatory; antiinflammatory; dermatological; antipsoriatic;  
KW antiulcer; gene therapy; vaccine; non-allergic inflammatory disease;  
KW psoriasis; eczema; allergic contact dermatitis; latex dermatitis;  
KW inflammatory bowel disease; ulcerative colitis; Crohn's disease; ss.  
XX  
OS Synthetic.  
XX

PN US2003050268-A1.  
XX  
PD 13-MAR-2003.  
XX  
PF 29-MAR-2002; 2002US-00112653.  
XX  
PR 29-MAR-2001; 2001US-0279642P.  
XX  
PA (KRIE/) KRIEG A M.  
PA (BERG/) BERG D J.  
XX  
PI Krieg AM, Berg DJ;  
XX  
DR WPI; 2003-521815/49.  
XX  
PT Treating non-allergic inflammatory diseases, such as psoriasis, eczema,  
PT allergic contact dermatitis, latex dermatitis or inflammatory bowel  
PT disease by administering an immunostimulatory nucleic acid.  
XX  
PS Disclosure; Page 31; 229pp; English.  
XX  
CC The invention describes a method of treating non-allergic inflammatory  
CC disease comprising administering to a subject having or at risk of  
CC developing a non-allergic inflammatory disease an immunostimulatory  
CC nucleic acid for prevention or treatment of the disease. The method is  
CC useful for treating non-allergic inflammatory diseases, such as  
CC psoriasis, eczema, allergic contact dermatitis, latex dermatitis or  
CC inflammatory bowel disease e.g., ulcerative colitis or Crohn's disease.  
CC This sequence represents an immunostimulatory nucleic acid  
XX  
SQ Sequence 20 BP; 12 A; 3 C; 2 G; 3 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 1776 TTTTGTGAACCCCATCTTT 1795  
Db 20 TTTTGTGAACGTCATGTTT 1  
RESULT 5161  
ACF06256  
ID ACF06256 standard; DNA; 20 BP.  
XX  
AC ACF06256;  
XX  
DT 06-OCT-2003 (first entry)  
XX  
DE Human NOV4 probe SEQ ID NO:34.  
XX  
KW Human; NOVX; cytostatic; antidiabetic; neuroprotective; antiparkinsonian;  
KW anorectic; gene therapy; vaccine; cancer; neurodegenerative disorder;  
KW Parkinson's disease; metabolic disorder; diabetes; obesity;  
KW tissue typing; probe; ss.  
XX  
OS Homo sapiens.  
OS Synthetic.  
XX  
PN WO2003052061-A2.  
XX  
PD 26-JUN-2003.  
XX  
PF 03-DEC-2002; 2002WO-US038821.  
XX  
PR 17-DEC-2001; 2001US-0341477P.  
PR 17-DEC-2001; 2001US-0341540P.  
PR 20-DEC-2001; 2001US-0342592P.  
PR 31-DEC-2001; 2001US-0344903P.  
PR 17-APR-2002; 2002US-0373288P.  
PR 15-MAY-2002; 2002US-0380981P.  
PR 17-MAY-2002; 2002US-0381495P.  
PR 28-MAY-2002; 2002US-0383744P.

PR 29-MAY-2002; 2002US-0384024P.  
PR 07-AUG-2002; 2002US-0401788P.  
PR 26-AUG-2002; 2002US-0406353P.  
PR 31-OCT-2002; 2002US-0422756P.  
PR 02-DEC-2002; 2002US-00307928.  
XX  
PA (CURA-) CURAGEN CORP.  
XX  
XX Alsobrook JP, Anderson DW, Boldog FL, Burgess CE, Catterton E;  
PI Edinger SR, Gorman L, Guo X, Ji W, Kekuda R, Li L, Patturajan M;  
PI Rieger DK, Shenoy SG, Spytek KA, Vernet CAM, Voss EZ, Zhong M;  
XX  
XX WPI; 2003-533005/50.  
XX  
XX New NOVX polypeptide, useful for preparing a composition for treating or  
PT preventing e.g. cancer, neurodegenerative disorders such as Parkinson's  
PT disease, or metabolic disorders such as diabetes or obesity, or for  
PT tissue typing.  
XX  
PS Example C; Page 159; 190pp; English.  
XX  
XX ACF06233 to ACF06242 encode the human NOVX proteins given in ABR83334 to  
CC ABR83343, designated NOV1a, NOV2a, NOV3a, NOV4a, NOV4b, NOV5a, NOV6a,  
CC NOV7a, NOV8a and NOV9a respectively. NOVX sequences can have cytostatic,  
CC antidiabetic, neuroprotective, antiparkinsonian and anorectic activities,  
CC and can be used in vaccines and gene therapy. The NOVX polypeptides can  
CC be used for preparing a composition for treating or preventing a  
CC pathology associated with the NOVX-polypeptides e.g. cancer,  
CC neurodegenerative disorders such as Parkinson's disease, or metabolic  
CC disorders such as diabetes or obesity, or for tissue typing. The present  
CC sequence represents a probe for human NOV4, which is used in an example  
CC from the present invention  
XX  
SQ Sequence 20 BP; 4 A; 8 C; 5 G; 3 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 606 ACCTGCTGCTGCCCGCCGCA 625  
Db 1 ACCTGCTGCAGGGCCACTCA 20  
  
RESULT 5162  
ABT43815/C  
ID ABT43815 standard; DNA; 20 BP.  
XX  
AC ABT43815;  
XX  
XX 16-OCT-2003 (first entry)  
XX  
DE Human PIP5K1a antisense oligonucleotide Seq ID67.  
XX  
KW Human; phosphatidylinositol-4-phosphate 5-kinase Ialpa; PIP5K1alpa;  
KW antiinflammatory; antitumour; cytostatic; gene therapy; tumour;  
KW antisense oligonucleotide; hyperproliferative disorder;  
KW inflammatory disorder; infection; inflammation; 2'-methoxyethyl wing;  
KW 2'-MOE wing; phosphorothioate backbone; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO2003050309-A1.  
XX  
PD 19-JUN-2003.  
XX  
PF 04-DEC-2002; 2002WO-US038615.  
XX  
PR 06-DEC-2001; 2001US-00003354.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Bennett CF, Freier SM;

XX WPI; 2003-627257/59.  
XX  
PT New antisense compound useful for treating diseases such as  
PT hyperproliferative or inflammatory disorders, hybridizes and inhibits  
PT nucleic acid encoding phosphatidylinositol-4-phosphate 5-kinase, I alpha.  
XX  
PS Claim 3; Page 83; 117pp; English.  
XX  
XX This invention relates to the novel antisense compounds, particularly  
CC antisense oligonucleotides, for the modulation of phosphatidylinositol-4-  
CC phosphate 5-kinase Ialpa (PIP5K1a) expression. The oligonucleotides of  
CC the invention may have antiinflammatory, antitumour or cytostatic  
CC activities through use in a gene therapy method. As a result the  
CC antisense oligonucleotides may be of use for the treatment of an animal  
CC having a disease associated with PIP5K1a such as a hyperproliferative or  
CC inflammatory disorder through inhibition of PIP5K1a expression. The  
CC oligonucleotides of the invention may also be used prophylactically to  
CC prevent or delay infection, inflammation or tumour formation. They may  
CC also be useful for diagnostics, therapeutics, prevention, as research  
CC reagents and kits or for distinguishing functions of various members of a  
CC biological pathway. The present sequence is that of an antisense  
CC oligonucleotide of the invention. The oligonucleotide is a chimeric  
CC phosphorothioate oligonucleotide which has five nucleotide 2'-  
CC methoxyethyl (2'-MOE) wings with a ten nucleotide deoxynucleotide gap.  
CC The oligonucleotide backbone is phosphorothioate throughout  
XX  
SQ Sequence 20 BP; 7 A; 1 C; 8 G; 4 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 2620 AATAACTTTGTCTCGTTCCT 2639  
Db 20 AAGAACCTTCTCTCCTTCCT 1  
  
RESULT 5163  
ACF05559  
ID ACF05559 standard; DNA; 20 BP.  
XX  
AC ACF05559;  
XX  
DT 06-NOV-2003 (first entry)  
XX  
DE Human secreted protein IPAA24020 forward PCR primer CP1.  
XX  
KW INSP033; IPAA24020; human; cytokine; cytostatic; antiinflammatory;  
KW immunosuppressive; cardiant; antibacterial; virucide; vulnerary;  
KW antipsoriatic; antiarthritic; immunomodulator; cerebroprotective;  
KW hepatotropic; anti-HIV; nootropic; antiarteriosclerotic; osteopathic;  
KW gene therapy; PCR; primer; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO2003055912-A2.  
XX  
PD 10-JUL-2003.  
XX  
PF 23-DEC-2002; 2002WO-GB005890.  
XX  
PR 21-DEC-2001; 2001GB-00030720.  
XX  
PA (ARES-) ARES TRADING SA.  
XX  
PI Fagan RJ, Phelps CB, Gutteridge A, Power C;  
XX  
XX WPI; 2003-569431/53.  
XX  
PT New polypeptide, useful for the manufacture of a medicament for treating  
PT disease, e.g., cell proliferative, autoimmune/inflammatory,  
PT cardiovascular or neurological disorders.

XX Example 2; Page 64; 117pp; English.

PS The present sequence is that of forward primer CP1 which, with reverse

XX primer CP2 (see ACF05560), was used in the PCR amplification of cDNA (see

CC ACF05540) encoding INSP033 (also called IPAA24020, see ABR62608), a

CC novel human secreted protein that is a member of the four helical bundle

CC cytokine family. The invention relates to novel secreted proteins such as

CC INSP033, and to the use of the proteins and the nucleic acids encoding

CC them in the diagnosis, prevention and treatment of e.g. cell

CC proliferative, autoimmune/inflammatory, cardiovascular, neurological,

CC developmental and metabolic disorders, infections and other pathological

CC conditions

XX Sequence 20 BP; 4 A; 8 C; 3 G; 5 T; 0 U; 0 Other;

SQ Query Match 0.5%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 4.5e+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 2322 GCTGCTTGTTCACCCCAAGT 2341

Db 1 GCTGCTTCTCCACACCAAGT 20

RESULT 5164

ACD05204

ID ACD05204 standard; DNA; 20 BP.

XX ACD05204;

AC ACD05204;

XX 05-AUG-2003 (first entry)

DT Tumour necrosis factor alpha antisense oligonucleotide #207.

XX Tumour necrosis factor alpha; TNF-alpha; antiinflammatory; antirheumatic;

DE antiarthritic; antidiabetic; dermatological; hepatotropic; antiasthmatic;

XX inflammatory disorder; inflammatory bowel disease; Crohn's disease;

KW colitis; rheumatoid arthritis; diabetes; pancreatitis;

KW multiple sclerosis; atopic dermatitis; asthma; hepatitis;

KW antisense technology; ss.

XX Synthetic.

OS US2003022848-A1.

XX 30-JAN-2003.

PD 02-APR-2001; 2001US-00824322.

XX 05-OCT-1998; 98US-00166186.

PR 18-MAY-1999; 99US-00313932.

XX (BAKE/) BAKER B F.

PA (BENN/) BENNETT C F.

PA (BUTL/) BUTLER M M.

PA (SHAN/) SHANAHAN W R.

XX Baker BF, Bennett CF, Butler MM, Shanahan WR;

PI WPI; 2003-447433/42.

DR Treating inflammatory disorders such as inflammatory bowel disease,

XX Crohn's disease or rheumatoid arthritis, in a subject, by administering

PT oligonucleotide which inhibits expression of human tumor necrosis factor

PT alpha.

XX Example 22; Page 37; 142pp; English.

PS The invention describes a method of treating an inflammatory disorder in

XX an individual, comprising administering to the individual an

CC oligonucleotide upto 30 nucleotides in length complementary to a nucleic

CC acid molecule encoding human tumor necrosis factor (TNF)-alpha. The

CC method is useful for treating an inflammatory disorder such as

CC inflammatory bowel disease, Crohn's disease, colitis or rheumatoid

CC arthritis, in an individual. The method is also useful for treating

CC diabetes, pancreatitis, multiple sclerosis, atopic dermatitis, asthma,

CC and hepatitis in an individual. This sequence represents an antisense

CC oligonucleotide used to modulate expression of tumour necrosis factor

CC alpha (TNF-alpha)

XX Sequence 20 BP; 3 A; 8 C; 4 G; 5 T; 0 U; 0 Other;

SQ Query Match 0.5%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 4.5e+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1453 CCCTGGAGACCAGATCCAG 1472

Db 1 CCCTGGTCTCCAGATTCAG 20

RESULT 5165

AAL61587/c

ID AAL61587 standard; DNA; 20 BP.

XX AAL61587;

AC AAL61587;

XX 22-SEP-2003 (first entry)

DT Human inhibitor-kappa B-R antisense oligonucleotide, ISIS #130512.

XX Human; inhibitor-kappa B-R; I-kappaBR; IKBR; I-kappa-B-related; NFKBIL2;

KW ikappab r; antisense; immune response; infection; inflammation; therapy;

KW tumour; prophylaxis; phosphorothioate; ss.

XX Homo sapiens.

OS Synthetic.

XX Key Location/Qualifiers

PH modified\_base 1..20

FT /\*tag= a

FT /mod\_base= OTHER

FT /note= "Phosphorothioate backbone; All cytidine residues

FT are 5-methylcytidines"

FT modified\_base 1..5

FT /\*tag= b

FT /mod\_base= OTHER

FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"

FT modified\_base 16..20

FT /\*tag= c

FT /mod\_base= OTHER

FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"

XX WO2003042360-A2.

PN 22-MAY-2003.

PD 05-NOV-2002; 2002WO-US035597.

XX 13-NOV-2001; 2001US-00993731.

XX (ISIS-) ISIS PHARM INC.

XX Monia BP, Watt AT;

PI WPI; 2003-468635/44.

XX New antisense oligonucleotides targeted to nucleic acids encoding

PT inhibitor-kappa B-R, useful for diagnosing or treating diseases

PT associated with expression of inhibitor-kappa B-R, e.g., a heightened

PT immune response or infection.

XX Claim 3; Page 75; 108pp; English.

PS The invention relates to antisense compounds targetted to a nucleic acid





KW hypo-responsive subject; immunostimulatory.  
XX Synthetic.  
OS  
XX US2003087848-A1.  
XX  
XX  
PD 08-MAY-2003.  
XX  
XX 02-FEB-2001; 2001US-00776479.  
XX  
XX 03-FEB-2000; 2000US-0179991P.  
XX  
XX (BRAT/) BRATZLER R L.  
PA (PETE/) PETERSEN D M.  
PA (FOUR/) FOURON Y.  
XX  
XX Bratzler RL, Petersen DM, Fouron Y;  
PI WPI; 2003-657977/62.  
XX  
XX Treating and/or preventing allergy or asthma using an immunostimulatory  
PT nucleic acid alone or in combination with an asthma/allergy medicament.  
XX  
XX  
PS Disclosure; Page 10; 22lpp; English.  
XX  
XX The invention relates to a method of treating or preventing allergy or  
CC asthma which comprises administering to a subject a poly-G nucleic acid  
CC in an aerosol formulation. The methods and compositions of the present  
CC invention are useful for diagnosing and/or treating asthma and allergy  
CC especially in a hypo-responsive subject. The present sequence represents  
CC an immunostimulatory nucleic acid of the invention.  
XX  
XX Sequence 20 BP; 2 A; 8 C; 2 G; 8 T; 0 U; 0 Other;  
SQ  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 1543 AGAGTAGGGAAGGACAGGA 1562  
DB 20 AGACTGAGGAAGGAAGTGA 1  
RESULT 5169  
ADB36898/c  
ID ADB36898 standard; DNA; 20 BP.  
XX  
XX ADB36898;  
AC  
XX  
XX 04-DEC-2003 (first entry)  
DT  
XX  
XX Immunostimulatory nucleic acid #512.  
DE  
XX  
XX ds; allergy; asthma; poly-G nucleic acid; aerosol formulation;  
KW hypo-responsive subject; immunostimulatory.  
XX  
XX Synthetic.  
OS  
XX US2003087848-A1.  
XX  
XX 08-MAY-2003.  
XX  
XX 02-FEB-2001; 2001US-00776479.  
XX  
XX 03-FEB-2000; 2000US-0179991P.  
XX  
XX (BRAT/) BRATZLER R L.  
PA (PETE/) PETERSEN D M.  
PA (FOUR/) FOURON Y.  
XX  
XX Bratzler RL, Petersen DM, Fouron Y;  
PI WPI; 2003-657977/62.  
XX  
XX Treating and/or preventing allergy or asthma using an immunostimulatory  
PT nucleic acid alone or in combination with an asthma/allergy medicament.  
XX  
XX  
PS Disclosure; Page 10; 22lpp; English.  
XX  
XX The invention relates to a method of treating or preventing allergy or  
CC asthma which comprises administering to a subject a poly-G nucleic acid  
CC in an aerosol formulation. The methods and compositions of the present  
CC invention are useful for diagnosing and/or treating asthma and allergy  
CC especially in a hypo-responsive subject. The present sequence represents  
CC an immunostimulatory nucleic acid of the invention.  
XX  
XX Sequence 20 BP; 2 A; 8 C; 2 G; 8 T; 0 U; 0 Other;  
SQ  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 1543 AGAGTAGGGAAGGACAGGA 1562  
DB 20 AGACTGAGGAAGGAAGTGA 1  
RESULT 5169  
ADB36898/c  
ID ADB36898 standard; DNA; 20 BP.  
XX  
XX ADB36898;  
AC  
XX  
XX 04-DEC-2003 (first entry)  
DT  
XX  
XX Immunostimulatory nucleic acid #512.  
DE  
XX  
XX ds; allergy; asthma; poly-G nucleic acid; aerosol formulation;  
KW hypo-responsive subject; immunostimulatory.  
XX  
XX Synthetic.  
OS  
XX US2003087848-A1.  
XX  
XX 08-MAY-2003.  
XX  
XX 02-FEB-2001; 2001US-00776479.  
XX  
XX 03-FEB-2000; 2000US-0179991P.  
XX  
XX (BRAT/) BRATZLER R L.  
PA (PETE/) PETERSEN D M.  
PA (FOUR/) FOURON Y.  
XX  
XX Bratzler RL, Petersen DM, Fouron Y;  
PI WPI; 2003-657977/62.  
XX

XX Treating and/or preventing allergy or asthma using an immunostimulatory  
PT nucleic acid alone or in combination with an asthma/allergy medicament.  
XX  
XX  
PS Disclosure; Page 12; 22lpp; English.  
XX  
XX The invention relates to a method of treating or preventing allergy or  
CC asthma which comprises administering to a subject a poly-G nucleic acid  
CC in an aerosol formulation. The methods and compositions of the present  
CC invention are useful for diagnosing and/or treating asthma and allergy  
CC especially in a hypo-responsive subject. The present sequence represents  
CC an immunostimulatory nucleic acid of the invention.  
XX  
XX Sequence 20 BP; 12 A; 3 C; 2 G; 3 T; 0 U; 0 Other;  
SQ  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 1776 TTTTGTGAACCCCATTCCTTT 1795  
DB 20 TTTTGTGAACGTCATGTTT 1  
RESULT 5170  
ADB37078  
ID ADB37078 standard; DNA; 20 BP.  
XX  
XX ADB37078;  
AC  
XX  
XX 04-DEC-2003 (first entry)  
DT  
XX  
XX Immunostimulatory nucleic acid #692.  
DE  
XX  
XX ds; allergy; asthma; poly-G nucleic acid; aerosol formulation;  
KW hypo-responsive subject; immunostimulatory.  
XX  
XX Synthetic.  
OS  
XX US2003087848-A1.  
XX  
XX 08-MAY-2003.  
XX  
XX 02-FEB-2001; 2001US-00776479.  
XX  
XX 03-FEB-2000; 2000US-0179991P.  
XX  
XX (BRAT/) BRATZLER R L.  
PA (PETE/) PETERSEN D M.  
PA (FOUR/) FOURON Y.  
XX  
XX Bratzler RL, Petersen DM, Fouron Y;  
PI WPI; 2003-657977/62.  
XX  
XX Treating and/or preventing allergy or asthma using an immunostimulatory  
PT nucleic acid alone or in combination with an asthma/allergy medicament.  
XX  
XX  
PS Disclosure; Page 16; 22lpp; English.  
XX  
XX The invention relates to a method of treating or preventing allergy or  
CC asthma which comprises administering to a subject a poly-G nucleic acid  
CC in an aerosol formulation. The methods and compositions of the present  
CC invention are useful for diagnosing and/or treating asthma and allergy  
CC especially in a hypo-responsive subject. The present sequence represents  
CC an immunostimulatory nucleic acid of the invention.  
XX  
XX Sequence 20 BP; 13 A; 2 C; 2 G; 3 T; 0 U; 0 Other;  
SQ  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 1776 TTTTGTGAACCCCATTCCTTT 1795  
DB 20 TTTTGTGAACGTCATGTTT 1

QY 1966 AATATTACCTTGAAAAAA 1985  
||| ||| ||| ||| ||| ||| |||  
Db 1 AAATCAACGTTGAAAAAA 20

RESULT 5171

ADC23725  
ID ADC23725 standard; DNA; 20 BP.

AC ADC23725;

XX 18-DEC-2003 (first entry)

DE Antisense PCR primer OL485 used to clone human HDAC9.

XX human; ss; histone deacetylase; HDAC; OL485; chromatin; gene therapy;  
KW cytotostatic; cell proliferative; apoptotic; cell differentiation disease;  
KW lymphoma; melanoma; polycythaemia rubra vera; essential thrombocythaemia;  
KW myeloid metaplasia; PCR; primer; HDAC9.

XX Homo sapiens.

OS WO2002102984-A2.

XX 27-DEC-2002.

PD 14-JUN-2002; 2002WO-US019051.

XX 14-JUN-2001; 2001US-0298173P.

PR 10-AUG-2001; 2001US-0311686P.

PR 04-SEP-2001; 2001US-0316995P.

XX (SLOK ) SLOAN-KETTERING INST CANCER RES.

XX Richon V, Zhou X, Rifkind RA, Marks PA;

XX WPI; 2003-167506/16.

XX New histone deacetylase polypeptides and polynucleotides, useful for  
PT treating or preventing a cell proliferative disease, an apoptotic  
PT disease, or a cell differentiation disease , e.g. cancers such as  
PT lymphoma, leukemia or melanoma.

XX Example; SEQ ID NO 19; 312pp; English.

XX This invention relates to a novel isolated histone deacetylase  
CC polypeptide (HDAC), and recombinant variants thereof. Specifically, it  
CC refers to HDAC9, which catalyses the removal of the acetyl group from the  
CC lysine residues of the N-terminal tails of nucleosomal core histones  
CC resulting in a more compact chromatin structure, a configuration  
CC associated with transcriptional repression. The present invention  
CC describes screening for candidate compounds that modulate this repression  
CC activity such as antibodies, agonists and antagonists. Furthermore, by  
CC gene therapy, these cytostatic compounds can be used to treat or prevent  
CC cell proliferative, apoptotic or cell differentiation diseases such as  
CC lymphoma, melanoma, polycythaemia rubra vera, essential thrombocythaemia  
CC or angiogenic myeloid metaplasia. This oligonucleotide sequence is the  
CC antisense PCR primer OL485, used to clone human HDAC9 of the invention.

SQ Sequence 20 BP; 5 A; 2 C; 8 G; 5 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 2548 AATTAAGAGGATGCTGGGCT 2567

Db 1 AATGTACAGGATGCTGGGCT 20

RESULT 5172

ADC13699/c

ID ADC13699 standard; DNA; 20 BP.

XX

AC

XX

DT

XX

DE

XX

KW

KW

KW

KW

KW

KW

KW

KW

KW

KW

KW

KW

XX

OS

XX

PN

XX

PD

XX

PF

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PR

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ADC13699;

18-DEC-2003 (first entry)

Human NOVX forward primer, SEQ ID No 184.

NOVX; FADD interacting protein; ATPase; H+ Transporting; Lysosomal;  
FGF 17; Single Pass Transmembrane; Beta-Ketoacyl Synthase; Neurulin 2;  
Glutamate Receptor Interacting Protein 2; Chr-Methyltransferase;  
NP25 Variant; GTPase-Activating Protein; ELKS; Sim2; RhoGAP;  
Phospholipase; Scavenger Receptor Domain Containing Protein;  
Metallothionein IA; NOGO receptor; FYVE; NOELIN;  
Cyclin Regulatory Subunit; Tetrairico Peptide Repeat Protein;  
Immunoglobulin Domain Containing Protein; PA Domain Containing Protein;  
Phenylalanine; Histidine Ammonia-Lyase; Cellular Retinaldehyde-Binding;  
Glutamine Repeat Containing Protein; TNF Receptor Associated Factor2;  
Vacuolar Protein Sorting Homologue R-VPS33A;  
Bola Domain Containing Protein; Neurotrophin Receptor;  
RAL Guanine Nucleotide Dissociation Stimulator; Armadillo/Beta-Catenin;  
Metalloprotease; T10 Ser/Thr-rich; Ring finger-like; cytotostatic;  
gene therapy; vaccine; cancer; primer; ss.

Homo sapiens.

WO2003004617-A2.

16-JAN-2003.

03-JUL-2002; 2002WO-US021359.

05-JUL-2001; 2001US-0303046P.

09-JUL-2001; 2001US-0303828P.

11-JUL-2001; 2001US-0304502P.

12-JUL-2001; 2001US-0305011P.

13-JUL-2001; 2001US-0305262P.

17-JUL-2001; 2001US-0306085P.

24-JUL-2001; 2001US-0307536P.

27-JUL-2001; 2001US-0308228P.

30-JUL-2001; 2001US-0308877P.

01-AUG-2001; 2001US-0309255P.

10-AUG-2001; 2001US-0311753P.

19-SEP-2001; 2001US-0323449P.

22-FEB-2002; 2002US-0358932P.

05-MAR-2002; 2002US-0361765P.

02-JUL-2002; 2002US-00188248.

(CURA-) CURAGEN CORP.

Patturajan M, Gerlach VL, Anderson DW, Taupier RJ, Zerhusen BD;  
Guo X, Casman SJ, Hjalt T, Miller CE, Kekuda R, Shimkets RA;  
Malyankar UM, Zhong M, Padigar M, Li L, Shenoy SG, Gorman L;  
Edinger SR;

WPI; 2003-201550/19.

New NOVX polypeptide, useful for preparing a composition for treating or  
preventing cancer.

Example 37; Page 313; 393pp; English.

The invention relates to a novel isolated NOVX polypeptide comprising: a  
sequence of 57-1149 amino acids as defined in the specification, or its  
mature form; a sequence that is at least 95% identical to the 57-1149  
amino acid polypeptide; or a sequence comprising one or more conservative  
substitutions in the 57-1149 amino acid polypeptide. The NOVX proteins of  
the invention include the following protein families: FADD interacting  
protein-like, ATPase, H+ Transporting, Lysosomal (vacuolar Proton Pump)-  
like, FGF 17-like, Single Pass Transmembrane-like, Beta-Ketoacyl Synthase  
-like, Neurulin 2-like, Glutamate Receptor Interacting Protein 2-like,  
Chr-Methyltransferase-like, NP25 Variant-like, GTPase-Activating Protein-  
like, ELKS-like, Sim2-like, RhoGAP-like, Phospholipase-like, Scavenger  
Receptor Domain Containing Protein-like, Metallothionein IA-like, NOGO

CC receptor-like, FYVE-protein, NOELIN-like, Cyclin Regulatory Subunit-like,  
CC Tetratrico Peptide Repeat Protein-like, Immunoglobulin Domain Containing  
CC Protein-like, PA Domain Containing Protein-like, Phenylalanine and  
CC Histidine Ammonia-Lyase-like, Cellular Retinaldehyde-Binding-like,  
CC Glutamine Repeat Containing Protein-like, TNF Receptor Associated Factor2  
CC -like, Vacuolar Protein Sorting Homologue R-VPS33A, Bola Domain  
CC Containing Protein-like, Neurotrophin Receptor-like, RAL Guanine  
CC Nucleotide Dissociation Stimulator-like, Armadillo/Beta-Catenin-like,  
CC Metalloprotease-like, T10 Ser/Thr-rich-like, and Ring finger-like  
CC protein. The NOVX proteins and the encoding polynucleotides have  
CC cytotstatic activity and can be used in gene therapy or a vaccine. The  
CC NOVX polypeptide is useful for preparing a composition for treating or  
CC preventing cancer. This polynucleotide sequence represents a forward  
CC primer of a gene encoding a NOVX protein of the invention.  
XX  
SQ Sequence 20 BP; 4 A; 6 C; 4 G; 6 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 1082 GTAGAAGGTGAAGCTGTCA 1101  
Db 20 GGACAAGGTGAATCTGTCA 1  
  
RESULT 5173  
ADC53902/c  
ID ADC53902 standard; DNA; 20 BP.  
XX  
AC ADC53902;  
XX  
DT 18-DEC-2003 (first entry)  
XX  
DE Pediococcus detection PCR primer #2.  
XX  
KW Pediococcus bacteria detection; spacer region; 16S rRNA; 23S rRNA;  
KW beer brewery; fermented-food; ss; PCR; primer.  
XX  
OS Pediococcus acidilactici.  
OS Pediococcus pentosaceus.  
XX  
PN JP2003038181-A.  
XX  
PD 12-FEB-2003.  
XX  
PF 01-JUN-2001; 2001JP-00165989.  
XX  
PR 01-JUN-2001; 2001JP-00165989.  
XX  
PA (ASAK ) ASahi BREWERIES LTD.  
XX  
DR WPI; 2003-590691/56.  
XX  
PT Oligonucleotide for detecting bacteria, comprises sequence of spacer  
PT region between genes encoding 16S rRNA and 23S rRNA of Pediococcus  
PT dextrinicus, Pediococcus parvulus, Pediococcus acidilactici, Pediococcus  
PT pentosaceus.  
XX  
PS Claim 21; SEQ ID NO 18; 18pp; Japanese.  
XX  
CC The invention comprises oligonucleotides for detecting bacteria, the  
CC oligonucleotides contain a gene sequence of a spacer region between genes  
CC encoding 16S rRNA and 23S rRNA of Pediococcus dextrinicus, P. parvulus,  
CC P. acidilactici or P. pentosaceus. The oligonucleotides of the invention  
CC are useful as primers for detecting P. dextrinicus, P. parvulus, P.  
CC acidilactici and P. pentosaceus, in beer brewery and in fermented-food  
CC preparation process. The present DNA sequence represents a detection PCR  
CC primer of the invention.  
XX  
SQ Sequence 20 BP; 3 A; 6 C; 4 G; 7 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 1734 CAGAAGGTGACAAGTACTGG 1753  
Db 20 CAGAAGATGTCAGACCTGG 1  
  
RESULT 5174  
AAD60260  
ID AAD60260 standard; DNA; 20 BP.  
XX  
AC AAD60260;  
XX  
DT 18-DEC-2003 (first entry)  
XX  
DE Oligonucleotide 1638 used for activating dendritic cells.  
XX  
KW Dendritic cell activation; cancer immunotherapy; infectious disease;  
KW allergy; cell therapy; ss.  
XX  
OS Unidentified.  
XX  
PN US2003100527-A1.  
XX  
PD 29-MAY-2003.  
XX  
PF 03-JUN-2002; 2002US-00161229.  
XX  
PR 15-JUL-1994; 94US-00276358.  
PR 07-FEB-1995; 95US-00386063.  
PR 30-OCT-1996; 96US-00738652.  
PR 30-OCT-1997; 97US-00960774.  
PR 13-NOV-1998; 98US-00191170.  
XX  
PA (IOWA ) UNIV IOWA RES FOUND.  
XX  
PI Krieg AM, Hartmann G;  
XX  
DR WPI; 2003-708674/67.  
XX  
PT Activating a dendritic cell useful for treating cancer, infectious  
PT diseases or allergies, comprises contacting the dendritic cell with an  
PT amount of an isolated nucleic acid that contains at least one  
PT un methylated CpG dinucleotide.  
XX  
PS Disclosure; Page 11; 5lpp; English.  
XX  
CC The invention relates to a method of activating a dendritic cell. The  
CC method involves contacting the dendritic cell with an isolated nucleic  
CC acid containing at least one un methylated CpG dinucleotide, where the  
CC nucleic acid is about 8-80 bases in length, in an amount that activates  
CC the dendritic cell. The compositions and methods of the invention are  
CC useful for cancer immunotherapy, or for treating an infectious disease  
CC (e.g. viral, bacterial or fungal infections) or allergy. The invention is  
CC useful in cell therapy. The present sequence is an oligonucleotide used  
CC for activating dendritic cells  
XX  
SQ Sequence 20 BP; 13 A; 2 C; 2 G; 3 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 1966 AATATTACCTTGAAAAAAA 1985  
Db 1 AAAATCAACGTTGAAAAAAA 20  
  
RESULT 5175  
ADD20133  
ID ADD20133 standard; DNA; 20 BP.  
XX

AC ADD20133;  
XX 15-JAN-2004 (first entry)  
DT Oreochromis niloticus microsatellite primer SEQ ID NO:768.  
XX  
DE single nucleotide polymorphism; SNP; fish; Salmo salar;  
XX Oreochromis niloticus; Atlantic halibut; microsatellite; cod;  
KW polymorphic site; seabass; salmonidae; Tilapia; rainbow trout; halibut;  
KW detection; primer; ss.  
XX  
OS Synthetic.  
OS Oreochromis niloticus.  
XX  
XX WO2003060160-A2.  
PN  
XX 24-JUL-2003.  
PD  
XX 17-JAN-2003; 2003WO-IB000112.  
XX  
PF 18-JAN-2002; 2002US-0349950P.  
XX PR 16-AUG-2002; 2002US-0404200P.  
XX  
XX (GENO-) GENOMAR ASA.  
PA  
XX Lie O, Slettan A, Hoyum M, Lingaas F;  
XX WPI; 2003-627388/59.  
DR  
XX Novel isolated nucleic acid molecule comprising single nucleotide  
PT polymorphism associated with fish, useful for forming PCR primers which  
PT are used for detecting single nucleotide polymorphisms in fish nucleic  
PT acids.  
XX  
PS Claim 18; SEQ ID NO 768; 233pp; English.  
XX  
CC The present invention describes an isolated nucleic acid (I) comprising a  
CC single nucleotide polymorphism (SNP) chosen from: (i) a nucleic acid of  
CC Salmo salar SNPs, Oreochromis niloticus SNPs or Atlantic halibut SNPs;  
CC and (ii) a nucleic acid having nucleotide sequence that hybridises to  
CC (i), or its complement under highly stringent hybridisation conditions.  
CC Also described: (1) an isolated oligonucleotide (II) comprising at least  
CC 17 contiguous nucleotides of a nucleotide sequence of S. salar SNPs, O.  
CC niloticus SNPs, O. niloticus microsatellites, Atlantic halibut SNPs, cod  
CC polymorphic sites and seabass polymorphic sites, or their complement; (2)  
CC a primer pair (III) suitable for use in PCR, comprising two (II) capable  
CC of amplifying a nucleotide sequence chosen from S. salar SNPs and, O.  
CC niloticus SNPs, O. niloticus microsatellites, Atlantic halibut SNPs, cod  
CC polymorphic sites and seabass polymorphic sites; and determining (M1) the  
CC origin of fish sample comprising providing a parent genotype database  
CC comprising a collection of candidate parent genotypes, where each of the  
CC candidate parent genotype represents a distinct origin, and comparing a  
CC sample genotype to the parent genotype database, where a match between  
CC the sample genotype and one of the candidate parent genotype identifies  
CC to the origin of the sample. (M1) is useful for determining the origin of  
CC a fish sample such as family salmonidae, S. salar, Tilapia, O. niloticus,  
CC rainbow trout, halibut, seabass and Atlantic cod. (II) is useful for  
CC detecting nucleic acid molecule comprising SNP in a sample, which  
CC involves contacting the sample containing nucleic acids with one or more  
CC (II) derived from nucleotide sequence of S. salar SNPs and O. niloticus  
CC SNPs, and identifying nucleic acid that hybridises to (II). (II) is  
CC useful for detecting nucleic acid molecule comprising a polymorphic  
CC sequence in a sample, comprising contacting the sample containing nucleic  
CC acids with one or more (II) which is derived from O. niloticus  
CC microsatellite, O. niloticus SNPs, Atlantic halibut SNPs, cod polymorphic  
CC sites or seabass polymorphic sites, and identifying a nucleic acid that  
CC hybridises to (II). (III) is useful for detecting nucleic acid molecule  
CC comprising a microsatellite sequence in sample. The present sequence is  
CC used in the exemplification of the present invention.  
XX  
SQ Sequence 20 BP; 8 A; 2 C; 6 G; 4 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 1010 TTGGACAAGATCGGGTTGAA 1029  
Db 1 TTGGACAACAATGGGATGAA 20  
RESULT 5176  
ADD21650/c  
ID ADD21650 standard; DNA; 20 BP.  
XX  
AC ADD21650;  
XX  
DT 15-JAN-2004 (first entry)  
XX  
DE Human mdm2 antisense oligonucleotide #213.  
XX  
KW antisense oligonucleotide; human; mdm2; hyperproliferation;  
KW hyperproliferative disorder; cancer; psoriasis; fibrosis;  
KW atherosclerosis; restenosis; apoptosis modulation; p21; ss;  
KW 2'-methoxyethoxy-residue; phosphorothioate backbone.  
XX  
OS Homo sapiens.  
XX  
XX WO2003048315-A2.  
PN  
XX 12-JUN-2003.  
DR  
XX 02-DEC-2002; 2002WO-US038281.  
XX PR 04-DEC-2001; 2001US-00005344.  
XX  
XX (ISIS-) ISIS PHARM INC.  
XX  
XX Miraglia LJ, Nero PS, Graham MJ, Monia BP, Koller E, Chiang MY;  
PI Manoharan M;  
XX WPI; 2003-577263/54.  
DR  
XX Novel antisense compound targeted to 5' untranslated region, coding  
PT region, or intron:exon junction of nucleic acid molecule encoding mdm2,  
PT useful for treating e.g. cancer, psoriasis or restenosis by inhibiting  
PT mdm2 expression.  
XX  
XX Claim 4; SEQ ID NO 215; 289pp; English.  
XX  
CC The invention comprises antisense oligonucleotides which are targeted to  
CC the human mdm2 gene. The antisense oligonucleotides of the invention are  
CC useful for reducing hyperproliferation of human cells. The antisense  
CC oligonucleotides are also useful for treating: hyperproliferative  
CC disorders (e.g. cancer), psoriasis, fibrosis, atherosclerosis, or  
CC restenosis. The antisense oligonucleotides are also useful for modulating  
CC apoptosis, and for increasing expression of p21. The present DNA sequence  
CC represents a human mdm2 gene antisense oligonucleotide of the invention.  
CC The present sequence contains 2'-methoxyethoxy-residues and has a  
CC phosphorothioate backbone.  
XX  
SQ Sequence 20 BP; 8 A; 1 C; 3 G; 8 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 2520 TTATTTCATATATATACAGG 2539  
Db 20 TTATTTCATATATATCAAG 1  
RESULT 5177  
ADD68563/c  
ID ADD68563 standard; DNA; 20 BP.  
XX



AC ADD68563;  
XX 15-JAN-2004 (first entry)  
XX SNP typing-related PCR primer - SEQ ID 120.  
DE single nucleotide polymorphism; SNP; typing; PCR; primer; ss.  
XX Unidentified.  
XX JP2002300894-A.  
XX 15-OCT-2002.  
XX 29-JAN-2002; 2002JP-00019752.  
XX 01-FEB-2001; 2001JP-00025700.  
XX (RIKA ) RIKAGAKU KENKYUSHO.  
XX WPI; 2003-397221/38.  
PT A typing method for single nucleotide polymorphism (SNP) of several  
PT hundred thousands of SNP sites with comparatively a small amount of  
PT genome DNA.  
XX Example 2; SEQ ID NO 120; 45pp; Japanese.  
XX The invention relates to a novel method for typing a single nucleotide  
XX polymorphism (SNP) using a small amount of genomic DNA comprising  
XX simultaneous amplification of plural base sequences containing one or  
XX more SNP sites and differentiation of the bases within the SNP sites. The  
XX method of the invention may be useful for typing several hundred thousand  
XX SNP sites using only a comparatively small amount of genomic DNA. The  
XX current sequence is that of the SNP typing-related PCR primer of the  
XX invention.  
XX Sequence 20 BP; 7 A; 4 C; 6 G; 3 T; 0 U; 0 Other;  
XX Query Match 0.5%; Score 13.6; DB 1; Length 20;  
XX Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 2094 CGTGTTCAAACGGGGCCCTT 2113  
DB 20 CGTGTTCAAACTGTGGCCCTT 1  
RESULT 5178  
ADD68537  
ID ADD68537 standard; DNA; 20 BP.  
XX  
AC ADD68537;  
XX 15-JAN-2004 (first entry)  
XX SNP typing-related PCR primer - SEQ ID 94.  
DE single nucleotide polymorphism; SNP; typing; PCR; primer; ss.  
XX Unidentified.  
XX JP2002300894-A.  
XX 15-OCT-2002.  
XX 29-JAN-2002; 2002JP-00019752.  
XX 01-FEB-2001; 2001JP-00025700.  
XX (RIKA ) RIKAGAKU KENKYUSHO.  
XX WPI; 2003-397221/38.  
PT A typing method for single nucleotide polymorphism (SNP) of several  
PT hundred thousands of SNP sites with comparatively a small amount of  
PT genome DNA.  
XX Example 2; SEQ ID NO 120; 45pp; Japanese.  
XX The invention relates to a novel method for typing a single nucleotide  
XX polymorphism (SNP) using a small amount of genomic DNA comprising  
XX simultaneous amplification of plural base sequences containing one or  
XX more SNP sites and differentiation of the bases within the SNP sites. The  
XX method of the invention may be useful for typing several hundred thousand  
XX SNP sites using only a comparatively small amount of genomic DNA. The  
XX current sequence is that of the SNP typing-related PCR primer of the  
XX invention.  
XX Sequence 20 BP; 7 A; 4 C; 6 G; 3 T; 0 U; 0 Other;  
XX Query Match 0.5%; Score 13.6; DB 1; Length 20;  
XX Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 2094 CGTGTTCAAACGGGGCCCTT 2113  
DB 20 CGTGTTCAAACTGTGGCCCTT 1  
RESULT 5178  
ADD68537  
ID ADD68537 standard; DNA; 20 BP.  
XX  
AC ADD68537;  
XX 15-JAN-2004 (first entry)  
XX SNP typing-related PCR primer - SEQ ID 94.  
DE single nucleotide polymorphism; SNP; typing; PCR; primer; ss.  
XX Unidentified.  
XX JP2002300894-A.  
XX 15-OCT-2002.  
XX 29-JAN-2002; 2002JP-00019752.  
XX 01-FEB-2001; 2001JP-00025700.  
XX (RIKA ) RIKAGAKU KENKYUSHO.  
XX WPI; 2003-397221/38.

XX A typing method for single nucleotide polymorphism (SNP) of several  
PT hundred thousands of SNP sites with comparatively a small amount of  
PT genome DNA.  
XX Example 2; SEQ ID NO 94; 45pp; Japanese.  
XX The invention relates to a novel method for typing a single nucleotide  
XX polymorphism (SNP) using a small amount of genomic DNA comprising  
XX simultaneous amplification of plural base sequences containing one or  
XX more SNP sites and differentiation of the bases within the SNP sites. The  
XX method of the invention may be useful for typing several hundred thousand  
XX SNP sites using only a comparatively small amount of genomic DNA. The  
XX current sequence is that of the SNP typing-related PCR primer of the  
XX invention.  
XX Sequence 20 BP; 9 A; 5 C; 6 G; 0 T; 0 U; 0 Other;  
XX Query Match 0.5%; Score 13.6; DB 1; Length 20;  
XX Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 1197 AGATGGCAGCTAGGAAGAAC 1216  
DB 1 AGAAGCGCAGCAAGGAAGCAC 20  
RESULT 5179  
ADD56647/c  
ID ADD56647 standard; DNA; 20 BP.  
XX  
AC ADD56647;  
XX 15-JAN-2004 (first entry)  
XX Human gene expression analysis multiplex Start-PCR primer #167.  
XX Gene expression; multiplex standardised reverse transcriptase-PCR;  
KW Start-PCR; high density oligonucleotide array; cDNA array;  
KW small biological sample; fine needle aspirate biopsy;  
KW laser captured microdissected material; human; primer; ss.  
XX Homo sapiens.  
XX US2003186246-A1.  
XX 02-OCT-2003.  
XX 28-MAR-2002; 2002US-00109349.  
XX 28-MAR-2002; 2002US-00109349.  
XX (WILL/) WILLEY J C.  
XX (CRAW/) CRAWFORD E L.  
XX Willey JC, Crawford EL;  
XX WPI; 2003-811730/76.  
XX Direct comparison of numerical gene expression values between samples of  
PT genes comprises using multiplex standardized reverse transcription-  
PT polymerase chain reaction.  
XX Example 1; SEQ ID NO 167; 59pp; English.  
XX The present invention relates to a method for the direct comparison of  
CC numerical gene expression values between samples of genes. The method  
CC comprises amplifying cDNA in the presence of a competitive template  
CC mixture and primer pairs for several genes and then amplifying aliquots  
CC of the PCR products using a primer pair specific for each gene. The  
CC method of amplification is by multiplex standardised reverse  
CC transcriptase-polymerase chain reaction (Start-PCR). High density  
CC oligonucleotide or cDNA arrays are used to measure PCR products following

CC quantitative Start-PCR. The method is useful for the assessment of gene  
CC expression in small biological samples such as fine needle aspirate  
CC biopsies, and laser captured microdissected materials. The method allows  
CC for the standardised measurement of hundreds of genes from the same  
CC sample, which in prior art, could only be assessed for one gene. The  
CC present sequence represents a multiplex Start-PCR primer which can be  
CC used in the method of the present invention.

XX  
SQ Sequence 20 BP; 6 A; 9 C; 4 G; 1 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 633 TGGATGCCGGCGCTGGCC 652  
||||| ||| |||||  
Db 20 TGGATGCTGCTGGTGGCC 1

RESULT 5180  
ADE28930  
ID ADE28930 standard; DNA; 20 BP.

AC ADE28930;

XX 29-JAN-2004 (first entry)

DE Forward Ag5892 RT-PCR primer used to amplify human NOV RNA.

XX NOVX; antidiabetic; anorectic; cardiant; hypotensive;  
KW antiarteriosclerotic; virucide; antibacterial; fungicide; protozoacide;  
KW nootropic; neuroprotective; antiparkinsonian; anticonvulsant;  
KW osteopathic; antiarthritic; antiinflammatory; dermatological;  
KW antiasthmatic; antilipaemic; metabolic; diabetes; obesity; infectious;  
KW anorexia; cancer; cardiovascular; hypertension; atherosclerosis;  
KW neurodegenerative; Alzheimer's disease; Parkinson's; epilepsy; immune;  
KW osteoarthritis; haemopoietic; inflammatory skin; asthma; dyslipidaemia;  
KW neurogenesis; cell differentiation; proliferation; haemopoiesis;  
KW wound healing; angiogenesis; gene therapy; chromosome mapping;  
KW tissue typing; human; NOV; PCR; primer; ss; RT-PCR.

XX Homo sapiens.

XX WO2003040330-A2.

PD 15-MAY-2003.

XX 05-NOV-2002; 2002WO-US035536.

PR 05-NOV-2001; 2001US-0338626P.

PR 05-DEC-2001; 2001US-0336600P.

PR 07-DEC-2001; 2001US-0338285P.

PR 12-DEC-2001; 2001US-0341346P.

PR 17-DEC-2001; 2001US-0341477P.

PR 20-DEC-2001; 2001US-0341540P.

PR 27-DEC-2001; 2001US-0344297P.

PR 31-DEC-2001; 2001US-0344903P.

PR 17-APR-2002; 2002US-0373288P.

PR 15-MAY-2002; 2002US-0380981P.

PR 17-MAY-2002; 2002US-0381495P.

PR 28-MAY-2002; 2002US-0383534P.

PR 28-MAY-2002; 2002US-0383744P.

PR 29-MAY-2002; 2002US-0383829P.

PR 29-MAY-2002; 2002US-0384024P.

PI Ellerman K, Ettenberg S, Gangolli EA, Gerlach VL, Gorman L;  
PI Grosse WM, Guo X, Hackett C, Ji W, Kekuda R, Khrantsov NV;  
PI Lepley DM, Li L, Macdougall JR, Malyankar UM, Mazur A, McQueeney K;  
PI Mezes PS, Miller CE, Millet I, Mishra VS, Padigaru M, Patturajan M;  
PI Pena CEA, Peyman JA, Rastelli L, Rieger DK, Shenoy SG, Shinkets RA;  
PI Smithson G, Starling G, Spytek KA, Stone DJ, Tchernev VT, Twomlow N;  
PI Vernet CAM, Zerhusen BD, Zhong M;

XX WPI; 2003-441555/41.

DR  
XX New isolated NOVX polypeptides and polynucleotides, useful for  
PT preventing, diagnosing or treating NOVX-associated disorders, e.g.  
PT osteoarthritis, obesity, atherosclerosis, cancer, Parkinson's disease,  
PT asthma, or infections.

XX Example C; SEQ ID NO 307; 447pp; English.

XX  
CC The invention relates to a novel isolated NOVX polypeptide. The  
CC polypeptide of the invention demonstrates, antidiabetic, anorectic,  
CC cardiant, hypotensive, antiarteriosclerotic, virucide, antibacterial,  
CC fungicide, protozoacide, nootropic, neuroprotective, antiparkinsonian,  
CC anticonvulsant, osteopathic, antiarthritic, antiinflammatory,  
CC dermatological, antiasthmatic and antilipaemic activities. The  
CC polypeptides, nucleic acid molecules and antibodies may be useful for  
CC treating or diagnosing diseases including metabolic disorders such as  
CC diabetes and obesity, infectious diseases, anorexia, cancer,  
CC cardiovascular diseases including hypertension and atherosclerosis,  
CC neurodegenerative disorders such as Alzheimer's disease, Parkinson's  
CC disease and epilepsy, immune disorders e.g. osteoarthritis, haemopoietic  
CC disorders, inflammatory skin disorders, asthma and dyslipidaemia.  
CC Furthermore, the nucleic acids and polypeptides may also be used to  
CC identify molecules that modulate or inhibit neurogenesis, cell  
CC differentiation and proliferation, haemopoiesis, wound healing and  
CC angiogenesis, as well as in gene therapy. Finally, the nucleic acids may  
CC be used as hybridisation probes, in chromosome mapping, tissue typing,  
CC preventive medicine and pharmacogenomics. The current sequence is that of  
CC the RT-PCR primer which was used within the exemplification of the  
CC invention.

XX  
SQ Sequence 20 BP; 5 A; 6 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1459 AGACCAGAGTCCAGCTGATT 1478  
||||| ||||| ||||| |||||  
Db 1 AGACCAAGCTCCAGCTGTTT 20

RESULT 5181

ADE86164/c

ID ADE86164 standard; DNA; 20 BP.

XX AC ADE86164;

XX 29-JAN-2004 (first entry)

DE HRAS gene regulatory region quadruplex DNA.

XX HRAS; quadruplex DNA; gene therapy; cancer; cytostatic; oncogene; human;  
KW ds.

XX Homo sapiens.

XX WO2003087317-A2.

XX PD 23-OCT-2003.

XX 04-APR-2003; 2003WO-US010658.

XX 05-APR-2002; 2002US-0370358P.

PR 20-AUG-2002; 2002US-0404966P.

PR 20-MAR-2003; 2003US-0456637P.  
XX (CYTE-) CYTERNEX INC.  
PA (ARIZ-) ARIZONA BOARD OF REGENTS.  
XX Siddiqui-Jain A, Grand CL, Bearss DJ, Hurley LH, Farrell TJ;  
PT WPI; 2003-853947/79.  
XX  
XX Identifying a compound that modulates the biological activity of a native  
PT quadruplex DNA for treating colorectal cancer comprises determining the  
PA presence or absence of interaction between the candidate compound and the  
XX test quadruplex DNA.  
PS Claim 3; Page 46; 69pp; English.  
XX  
CC The present sequence is from the upstream regulatory region of the HRAS  
CC gene. The sequence is involved in the regulation of transcription. It  
CC forms a quadruplex structure through the formation of guanine tetrads.  
CC The sequence provides an example of intramolecular chair quadruplex DNA  
CC structures that have been identified as oncogene regulators. Certain  
CC mutations in quadruplex forming nucleotides sequences have been shown to  
CC destabilise quadruplex structure and are associated with cancer. Methods  
CC are provided for identifying quadruplex nucleotide sequences having  
CC destabilising guanine substitutions, for determining whether a subject is  
CC at risk of developing or having cancer, pharmacogenomic methods for  
CC targeting appropriate prevention or therapeutic regimens, methods for  
CC screening molecules that interact with stabilised and destabilised  
CC quadruplexes, and therapeutic methods for treating cancers, such as  
CC antisense nucleic acid cancer therapy that specifically targets DNA in  
CC subjects having a quadruplex-destabilising mutation.  
XX  
SQ Sequence 20 BP; 0 A; 3 C; 17 G; 0 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 289 CCCCGCGCCACCCCTCTCCC 308  
Db | | | | | | | | | | | | | | | | | |  
20 CCCCGCGCCCGCCCGCCCGCC 1  
RESULT 5182  
ADE86160/C  
ID ADE86160 standard; DNA; 20 BP.  
XX  
AC ADE86160;  
XX  
DT 29-JAN-2004 (first entry)  
XX  
DE RET gene regulatory region quadruplex DNA.  
XX  
KW Platelet derived growth factor alpha; PDGF; quadruplex DNA; gene therapy;  
KW cancer; cytostatic; oncogene; human; ds.  
XX  
OS Homo sapiens.  
XX  
PN WO2003087317-A2.  
XX  
PD 23-OCT-2003.  
XX  
PF 04-APR-2003; 2003WO-US010658.  
XX  
PR 05-APR-2002; 2002US-0370358P.  
PR 20-AUG-2002; 2002US-0404966P.  
PR 20-MAR-2003; 2003US-0456637P.  
XX  
PA (CYTE-) CYTERNEX INC.  
PA (ARIZ-) ARIZONA BOARD OF REGENTS.  
PI Siddiqui-Jain A, Grand CL, Bearss DJ, Hurley LH, Farrell TJ;  
XX

DR WPI; 2003-853947/79.  
XX Identifying a compound that modulates the biological activity of a native  
PT quadruplex DNA for treating colorectal cancer comprises determining the  
PT presence or absence of interaction between the candidate compound and the  
PT test quadruplex DNA.  
XX  
PS Claim 3; Page 46; 69pp; English.  
XX  
CC The present sequence is from the upstream regulatory region of the RET.  
CC It forms a chair quadruplex structure ADE86192 with 2 stable tetrads that  
CC regulates transcription. The sequence provides an example of  
CC intramolecular chair quadruplex DNA structures that have been identified  
CC as oncogene regulators. Certain mutations in quadruplex forming  
CC nucleotides sequences have been shown to destabilise quadruplex structure  
CC and are associated with cancer. Methods are provided for identifying  
CC quadruplex nucleotide sequences having destabilising guanine  
CC substitutions, for determining whether a subject is at risk of developing  
CC or having cancer, pharmacogenomic methods for targeting appropriate  
CC prevention or therapeutic regimens, methods for screening molecules that  
CC interact with stabilised and destabilised quadruplexes, and therapeutic  
CC methods for treating cancers, such as antisense nucleic acid cancer  
CC therapy that specifically targets DNA in subjects having a quadruplex-  
CC destabilising mutation.  
XX  
SQ Sequence 20 BP; 0 A; 3 C; 17 G; 0 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 289 CCCCGCGCCACCCCTCTCCC 308  
Db | | | | | | | | | | | | | | | | | |  
20 CCCCGCGCCCGCCCGCCCGCC 1  
RESULT 5183  
ADD81701/C  
ID ADD81701 standard; DNA; 20 BP.  
XX  
AC ADD81701;  
XX  
DT 29-JAN-2004 (first entry)  
XX  
DE HIV PRT antisense derived probe #630.  
XX  
KW ss; oligonucleotide hybridisation potential; efficient hybridisation;  
KW large array; minimum oligonucleotide synthesis; probe.  
XX  
OS Human immunodeficiency virus.  
XX  
PN US2003054346-A1.  
XX  
PD 20-MAR-2003.  
XX  
PF 15-FEB-2001; 2001US-00784674.  
XX  
PR 10-FEB-1998; 98US-00021701.  
XX  
PA (SHAN/) SHANNON K W.  
PA (WOLB/) WOLBER P K.  
PA (DELE/) DELENSTARR G C.  
PA (WEBB/) WEBB P G.  
PA (KINC/) KINCAID R H.  
XX  
PI Shannon KW, Wolber PK, Delenstarr GC, Webb PG, Kincaid RH;  
XX WPI; 2003-743746/70.  
DR  
XX Predicting potential of oligonucleotides to hybridize to target  
PT nucleotide sequence comprises determining and evaluating for each  
PT oligonucleotide a parameter predictive of the oligonucleotides ability to  
PT hybridize with target.

XX Example 2; SEQ ID NO 774; 423pp; English.

PS The invention relates to a method of predicting the potential of

XX oligonucleotides to hybridize to target nucleotide sequences. The method

CC is useful for predicting the potential of an oligonucleotide to hybridize

CC to a target nucleotide sequence, e.g. RNA or DNA or a sequence that

CC contains chemically modified nucleotides. The method is also useful for

CC predicting the potential of the oligonucleotides to hybridize to a

CC complementary target nucleotide sequence. The method is useful to predict

CC efficient hybridisation oligonucleotides for each of multiple target

CC sequences therefore very large arrays may be constructed and tested with

CC minimum synthesis of oligonucleotides. The present sequence represents a

XX HIV PRT antisense derived probe.

SQ Sequence 20 BP; 2 A; 3 C; 1 G; 14 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 4.5e+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 2784 TGAAGAAAAAATATAAA 2803

Db 20 TGACAGAGAGAAAAATATAAA 1

RESULT 5184

ADD81702/c

ID ADD81702 standard; DNA; 20 BP.

XX ADD81702;

AC ADD81702;

XX 29-JAN-2004 (first entry)

DT HIV PRT antisense derived probe #631.

DE ss; oligonucleotide hybridisation potential; efficient hybridisation;

XX large array; minimum oligonucleotide synthesis; probe.

OS Human immunodeficiency virus.

XX US2003054346-A1.

PN 20-MAR-2003.

XX 15-FEB-2001; 2001US-00784674.

PF 10-FEB-1998; 98US-00021701.

XX (SHAN/) SHANNON K W.

PA (WOLB/) WOLBER P K.

PA (DELE/) DELENSTARR G C.

PA (WEBB/) WEBB P G.

PA (KINC/) KINCAID R H.

XX Shannon KW, Wolber PK, Delenstarr GC, Webb PG, Kincaid RH;

PI WPI; 2003-743746/70.

XX Predicting potential of oligonucleotides to hybridize to target

PT nucleotide sequence comprises determining and evaluating for each

PT oligonucleotide a parameter predictive of the oligonucleotides ability to

PT hybridize with target.

XX Example 2; SEQ ID NO 775; 423pp; English.

PS The invention relates to a method of predicting the potential of

XX oligonucleotides to hybridize to target nucleotide sequences. The method

CC is useful for predicting the potential of an oligonucleotide to hybridize

CC to a target nucleotide sequence, e.g. RNA or DNA or a sequence that

CC contains chemically modified nucleotides. The method is also useful for

CC predicting the potential of the oligonucleotides to hybridize to a

CC complementary target nucleotide sequence. The method is useful to predict

CC efficient hybridisation oligonucleotides for each of multiple target

CC sequences therefore very large arrays may be constructed and tested with

CC minimum synthesis of oligonucleotides. The present sequence represents a

XX HIV PRT antisense derived probe.

SQ Sequence 20 BP; 3 A; 3 C; 1 G; 13 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 4.5e+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 2783 TTGAAAAAATATAAA 2802

Db 20 TTGACAGAGAGAAAAATATAAA 1

RESULT 5185

ADD81281/c

ID ADD81281 standard; DNA; 20 BP.

XX ADD81281;

AC ADD81281;

XX 29-JAN-2004 (first entry)

DT HIV PRT antisense derived probe #210.

DE ss; oligonucleotide hybridisation potential; efficient hybridisation;

XX large array; minimum oligonucleotide synthesis; probe.

OS Human immunodeficiency virus.

XX US2003054346-A1.

PN 20-MAR-2003.

XX 15-FEB-2001; 2001US-00784674.

PF 10-FEB-1998; 98US-00021701.

XX (SHAN/) SHANNON K W.

PA (WOLB/) WOLBER P K.

PA (DELE/) DELENSTARR G C.

PA (WEBB/) WEBB P G.

PA (KINC/) KINCAID R H.

XX Shannon KW, Wolber PK, Delenstarr GC, Webb PG, Kincaid RH;

PI WPI; 2003-743746/70.

XX Predicting potential of oligonucleotides to hybridize to target

PT nucleotide sequence comprises determining and evaluating for each

PT oligonucleotide a parameter predictive of the oligonucleotides ability to

PT hybridize with target.

XX Example 2; SEQ ID NO 354; 423pp; English.

PS The invention relates to a method of predicting the potential of

XX oligonucleotides to hybridize to target nucleotide sequences. The method

CC is useful for predicting the potential of an oligonucleotide to hybridize

CC to a target nucleotide sequence, e.g. RNA or DNA or a sequence that

CC contains chemically modified nucleotides. The method is also useful for

CC predicting the potential of the oligonucleotides to hybridize to a

CC complementary target nucleotide sequence. The method is useful to predict

CC efficient hybridisation oligonucleotides for each of multiple target

CC sequences therefore very large arrays may be constructed and tested with

CC minimum synthesis of oligonucleotides. The present sequence represents a

XX HIV PRT antisense derived probe.

SQ Sequence 20 BP; 7 A; 2 C; 3 G; 8 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 4.5e+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;



QY 1818 AAGTTTGTAGATCTTTTAAA 1837  
||| ||||| |||||  
Db 20 AAATCTTAGAGCCTTTTAAA 1

RESULT 5186

ADD81478

ID ADD81478 standard; DNA; 20 BP.

XX AC ADD81478;

XX DT 29-JAN-2004 (first entry)

XX DE HIV PRT antisense derived probe #407.

XX KW ss; oligonucleotide hybridisation potential; efficient hybridisation;  
XX KW large array; minimum oligonucleotide synthesis; probe.

XX OS Human immunodeficiency virus.

XX PN US2003054346-A1.

XX PD 20-MAR-2003.

XX PF 15-FEB-2001; 2001US-00784674.

XX PR 10-FEB-1998; 98US-00021701.

XX PA (SHAN/) SHANNON K W.

PA (WOLB/) WOLBER P K.

PA (DELE/) DELENSTARR G C.

PA (WEBB/) WEBB P G.

PA (KINC/) KINCAID R H.

XX PI Shannon KW, Wolber PK, Delenstarr GC, Webb PG, Kincaid RH;

XX WPI; 2003-743746/70.

XX PT Predicting potential of oligonucleotides to hybridize to target  
PT nucleotide sequence comprises determining and evaluating for each  
PT oligonucleotide a parameter predictive of the oligonucleotides ability to  
PT hybridize with target.

XX PS Example 2; SEQ ID NO 551; 423pp; English.

XX CC The invention relates to a method of predicting the potential of  
oligonucleotides to hybridise to target nucleotide sequences. The method  
is useful for predicting the potential of an oligonucleotide to hybridise  
to a target nucleotide sequence, e.g. RNA or DNA or a sequence that  
contains chemically modified nucleotides. The method is also useful for  
predicting the potential of the oligonucleotides to hybridise to a  
complementary target nucleotide sequence. The method is useful to predict  
efficient hybridisation oligonucleotides for each of multiple target  
sequences therefore very large arrays may be constructed and tested with  
minimum synthesis of oligonucleotides. The present sequence represents a  
HIV PRT antisense derived probe.

XX SQ Sequence 20 BP; 2 A; 2 C; 1 G; 15 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 4.5e+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 2159 TTTCCTCTTTTCTTTTCTTTT 2178

||| ||||| |||||  
Db 1 TTACTGATTTTCTTTTCTTTT 20

RESULT 5187

ADD81703/c

ID ADD81703 standard; DNA; 20 BP.

XX

AC ADD81703;

XX DT 29-JAN-2004 (first entry)

XX DE HIV PRT antisense derived probe #632.

XX KW ss; oligonucleotide hybridisation potential; efficient hybridisation;  
XX KW large array; minimum oligonucleotide synthesis; probe.

XX OS Human immunodeficiency virus.

XX PN US2003054346-A1.

XX PD 20-MAR-2003.

XX PF 15-FEB-2001; 2001US-00784674.

XX PR 10-FEB-1998; 98US-00021701.

XX PA (SHAN/) SHANNON K W.

PA (WOLB/) WOLBER P K.

PA (DELE/) DELENSTARR G C.

PA (WEBB/) WEBB P G.

PA (KINC/) KINCAID R H.

XX PI Shannon KW, Wolber PK, Delenstarr GC, Webb PG, Kincaid RH;

XX WPI; 2003-743746/70.

XX PT Predicting potential of oligonucleotides to hybridize to target  
PT nucleotide sequence comprises determining and evaluating for each  
PT oligonucleotide a parameter predictive of the oligonucleotides ability to  
PT hybridize with target.

XX PS Example 2; SEQ ID NO 776; 423pp; English.

XX CC The invention relates to a method of predicting the potential of  
oligonucleotides to hybridise to target nucleotide sequences. The method  
is useful for predicting the potential of an oligonucleotide to hybridise  
to a target nucleotide sequence, e.g. RNA or DNA or a sequence that  
contains chemically modified nucleotides. The method is also useful for  
predicting the potential of the oligonucleotides to hybridise to a  
complementary target nucleotide sequence. The method is useful to predict  
efficient hybridisation oligonucleotides for each of multiple target  
sequences therefore very large arrays may be constructed and tested with  
minimum synthesis of oligonucleotides. The present sequence represents a  
HIV PRT antisense derived probe.

XX SQ Sequence 20 BP; 3 A; 3 C; 1 G; 13 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 4.5e+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 2782 ATTGAAAAAATAAAAAA 2801

||||| ||||| |||||  
Db 20 ATTGACAGAGAAAAAATAA 1

RESULT 5188

ADE10334/c

ID ADE10334 standard; DNA; 20 BP.

XX AC ADE10334;

XX DT 29-JAN-2004 (first entry)

XX DE Plasmid pKN108-derived probe PCR primer #1.

XX KW Mitomycin biosynthetic protein; mitomycin C; antibiotic; MC; apoptosis;  
XX KW tumour hypoxia; cytostatic; anti-tumour agent; cancer; ss; probe.

XX OS Unidentified.

XX PN US2003134398-A1.  
XX PD 17-JUL-2003.  
XX PF 12-SEP-2001; 2001US-009533348.  
XX PR 12-SEP-2001; 2001US-009533348.  
XX PA (SHER/) SHERMAN D H.  
XX PA (MAOY/) MAO Y.  
XX PA (VARO/) VAROGLU M.  
XX PA (HEMM/) HE M.  
XX PA (SHEL/) SHELDON P.  
PI Sherman DH, Mao Y, Varoglu M, He M, Sheldon P;  
XX WPI; 2003-863498/80.  
XX  
PT New nucleic acid molecule comprising a sequence having mitomycin  
PT biosynthetic gene cluster, useful for enhancing production of  
PT antibiotics.  
XX  
PS Example 2; SEQ ID NO 89; 308pp; English.  
XX  
CC The invention relates to an isolated and purified nucleic acid molecule  
CC comprising a sequence having mitomycin biosynthetic gene cluster, or its  
CC variant or fragment. Also included are an expression cassette comprising  
CC the novel nucleic acid molecule (operably linked to a promoter functional  
CC in a host cell), a recombinant bacterial host cell in which at least a  
CC portion of a nucleic acid molecule comprising mitomycin biosynthetic gene  
CC cluster is disrupted (resulting in a recombinant host cell that produces  
CC altered levels of mitomycin relative to a corresponding nonrecombinant  
CC bacterial host cell), introducing exogenous DNA into a refractory  
CC Streptomyces strain, identifying a nucleic acid molecule that is related  
CC to at least a portion of a nucleic acid molecule comprising a mitomycin  
CC gene cluster, preparing a compound or its salt from the recombinant host  
CC cell and a product produced by the recombinant host cell. The nucleic  
CC acid encodes a MitT, MitS, MitR, MitQ, MitP, MitO, MitN, MitM, MitL,  
CC MitK, MitJ, MitI, MitH, MitG, MitF, MitE, MitD, MitC, MitB, MitA and/or  
CC MmCA-MmcY. The nucleic acid is useful for enhancing production of  
CC mitomycin antibiotics, which induce apoptosis and hence are useful as  
CC anti-tumour (via tumour hypoxia) agents and are useful in treating  
CC cancer. The gene cluster was isolated from Streptomyces lavendulae. The  
CC present sequence is a probe used to screen an S. lavendulae genomic DNA  
CC library for mitomycin biosynthetic gene sequences.  
XX  
SQ Sequence 20 BP; 1 A; 8 C; 8 G; 3 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 507 TGCCCTCGCACCGGCGC 526  
Db 20 TGCGCGCAGCAGCGACGC 1  
RESULT 5189  
ADE10335  
ID ADE10335 standard; DNA; 20 BP.  
XX  
AC ADE10335;  
XX  
DT 29-JAN-2004 (first entry)  
XX  
DE Plasmid pKN108-derived probe PCR primer #2.  
XX  
KW Mitomycin biosynthetic protein; mitomycin C; antibiotic; MC; apoptosis;  
KW tumour hypoxia; cytostatic; anti-tumour agent; cancer; ss; probe.  
XX Unidentified.  
OS  
XX

PN US2003134398-A1.  
XX PD 17-JUL-2003.  
XX PF 12-SEP-2001; 2001US-009533348.  
XX PR 12-SEP-2001; 2001US-009533348.  
XX PA (SHER/) SHERMAN D H.  
XX PA (MAOY/) MAO Y.  
XX PA (VARO/) VAROGLU M.  
XX PA (HEMM/) HE M.  
XX PA (SHEL/) SHELDON P.  
PI Sherman DH, Mao Y, Varoglu M, He M, Sheldon P;  
XX WPI; 2003-863498/80.  
XX  
PT New nucleic acid molecule comprising a sequence having mitomycin  
PT biosynthetic gene cluster, useful for enhancing production of  
PT antibiotics.  
XX  
PS Example 2; SEQ ID NO 90; 308pp; English.  
XX  
CC The invention relates to an isolated and purified nucleic acid molecule  
CC comprising a sequence having mitomycin biosynthetic gene cluster, or its  
CC variant or fragment. Also included are an expression cassette comprising  
CC the novel nucleic acid molecule (operably linked to a promoter functional  
CC in a host cell), a recombinant bacterial host cell in which at least a  
CC portion of a nucleic acid molecule comprising mitomycin biosynthetic gene  
CC cluster is disrupted (resulting in a recombinant host cell that produces  
CC altered levels of mitomycin relative to a corresponding nonrecombinant  
CC bacterial host cell), introducing exogenous DNA into a refractory  
CC Streptomyces strain, identifying a nucleic acid molecule that is related  
CC to at least a portion of a nucleic acid molecule comprising a mitomycin  
CC gene cluster, preparing a compound or its salt from the recombinant host  
CC cell and a product produced by the recombinant host cell. The nucleic  
CC acid encodes a MitT, MitS, MitR, MitQ, MitP, MitO, MitN, MitM, MitL,  
CC MitK, MitJ, MitI, MitH, MitG, MitF, MitE, MitD, MitC, MitB, MitA and/or  
CC MmCA-MmcY. The nucleic acid is useful for enhancing production of  
CC mitomycin antibiotics, which induce apoptosis and hence are useful as  
CC anti-tumour (via tumour hypoxia) agents and are useful in treating  
CC cancer. The gene cluster was isolated from Streptomyces lavendulae. The  
CC present sequence is a probe used to screen an S. lavendulae genomic DNA  
CC library for mitomycin biosynthetic gene sequences.  
XX  
SQ Sequence 20 BP; 3 A; 8 C; 8 G; 1 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 20;  
Best Local Similarity 80.0%; Pred. No. 4.5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 507 TGCCCTCGCACCGGCGC 526  
Db 1 TGCGCGCAGCAGCGACGC 20  
RESULT 5190  
ADE84223  
ID ADE84223 standard; DNA; 20 BP.  
XX  
AC ADE84223;  
XX  
DT 29-JAN-2004 (first entry)  
XX  
DE Human lymphoid cell proliferative disorder pre-treated DNA primer #7.  
XX  
KW Lymphoid cell proliferative disorder; methylation;  
KW methylated CpG dinucleotide; single nucleotide polymorphism; SNP;  
KW diffuse large B-cell lymphoma; mantle cell lymphoma;  
KW chronic lymphocytic leukemia; small lymphocytic lymphoma;  
KW follicular lymphoma; diagnosis; prognosis; primer; ss.  
XX



XX PD 06-MAR-2003.  
XX PF 22-AUG-2002; 2002WO-EP009386..  
XX PR 24-AUG-2001; 2001DE-01040651.  
XX PR 30-APR-2002; 2002DE-01019373.  
XX PA (ADNA-) ADNAGEN AG.  
XX PI Waschuetza S, Schnakenberg E, Lustig M;  
XX PT WPI; 2003-290079/28.  
XX PT Diagnostic kit, useful for assessing a subject's tolerance of drugs,  
XX PT comprises reagents for determining alleles of genes encoding  
XX PT detoxification enzymes.  
XX PS Claim 6; Page 80; 156pp; German.  
XX XX This invention describes a novel diagnostic kit for determining tolerance  
XX CC of pharmaceuticals in humans by determining allelic variability of at  
XX CC least two polymorphisms of a human enzyme involved in phase I and/or II  
XX CC of the detoxification mechanism in a blood, tissue or other human sample,  
XX CC where tolerance is determined from presence or absence of alleles. The  
XX CC kit comprises two pairs of oligonucleotide primers, in which each pair  
XX CC amplifies, by PCR, part of a gene for a human detoxification mechanism-  
XX CC associated enzyme. The kit may also contain two further pairs of  
XX CC oligonucleotides, serving as probes for detection of amplified DNA  
XX CC segments, especially where the probes are complementary to a single  
XX CC strand of one allele of the target gene. The probes are labelled with  
XX CC fluorophores (LC-Red640 or LC-Red705 for 5'-labelling or fluorescein for  
XX CC 3'-labelling) which generate a different signal in the hybridized and non  
XX CC -hybridized condition. The enzymes detected include NAT2, CYP2D6, CYP1A2,  
XX CC CYP3A4, MEH, TPMT, MTHFR, paraoxonase, CYP2C9, CYP2C19, CYP2E1 or DPD.  
XX CC The kit is used to determine an individual's tolerance of a particular  
XX CC drug, to establish a suitable dose and/or to predict if a subject will  
XX CC show side-effects to a drug. The kit provides minimally invasive, safe  
XX CC and reliable determination of the metabolic capacity of phase I and/or II  
XX CC enzymes at the molecular level. This sequence represents a probe used in  
XX CC the kit of the invention.  
XX SQ Sequence 21 BP; 14 A; 1 C; 1 G; 5 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 21;  
Best Local Similarity 80.0%; Pred. No. 4.8e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 2784 TGAATAAAAAAAAAAAAAAAAAA 2803  
Db 2 TGATTAAATAATTAATAATAA 21  
RESULT 5193  
AAX14678/c  
ID AAX14678 standard; DNA; 22 BP.  
XX AC AAX14678;  
XX XX 24-MAR-1999 (first entry)  
XX DE Triple helix forming nucleotides 9-30 of gamma-crystallin gene.  
XX KW Triple-helix forming region; Triplex formation; DNA detection;  
XX KW identification; bacteria; oncogene; virus; ds.  
XX OS Homo sapiens.  
XX XX US5861244-A.  
XX PN 19-JAN-1999.  
XX PD 22-DEC-1993; 93US-00173489.

XX PR 29-OCT-1992; 92US-00968436.  
XX XX (PROF-) PROFILE DIAGNOSTIC SCI INC.  
XX PA Hepburn AG, Wang C;  
XX PI WPI; 1999-130384/11.  
XX DR Assay of genetic sequences based on triplex formation from double  
XX XX stranded analyte - and hybrid of anchor and reporter sequences, with  
XX PT reporter released if triplex formation occurs, used e.g. to identify  
XX PT bacteria.  
XX PS Disclosure; Col 15-16; 168pp; English.  
XX XX The present sequence represents a potential triple-helix forming region.  
XX CC It can be used to demonstrate the assay of the invention. The assay  
XX CC comprises adding a sample containing double-stranded DNA test sequences,  
XX CC e.g. containing the present sequence, to an aqueous medium containing at  
XX CC least one complex of anchor DNA, attached to a solid support, and  
XX CC reporter DNA, where either a part of the anchor DNA or reporter DNA is  
XX CC designed to form a triple-strand structure with part of the test  
XX CC sequence. Triplex formation results in displacement of the reporter DNA  
XX CC which is detected as an indication of the presence of the DNA test  
XX CC sequence. The method is used to detect DNA sequences, particularly for  
XX CC identification of bacteria (by detecting genes for ribosomal RNA) in  
XX CC clinical samples, but also detection of oncogenes and Hepatitis B virus  
XX SQ Sequence 22 BP; 1 A; 5 C; 0 G; 16 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.6; DB 1; Length 22;  
Best Local Similarity 80.0%; Pred. No. 5e+03;  
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 2785 GAAAAAAAAAAAAAAAAA 2804  
Db 21 GAAATAAAGAGAGAGAAAA 2  
RESULT 5194  
AAT03687/c  
ID AAT03687 standard; DNA; 24 BP.  
XX AC AAT03687;  
XX XX 17-JUL-1996 (first entry)  
XX DE Homopyrimidine probe for use in triplex-affinity capture method.  
XX KW Probe; purification method; triplex-affinity capture; triple helix;  
XX KW specific binding pair; biotin; avidin; antigen; antibody; immobilisation;  
XX KW heterogeneous mix; S.cerevisiae; ss.  
XX OS Synthetic.  
XX XX US5482836-A.  
XX PN 09-JAN-1996.  
XX PD 14-JAN-1993; 93US-00004552.  
XX PF 14-JAN-1993; 93US-00004552.  
XX PR (REGC ) UNIV CALIFORNIA.  
XX PA Smith CL, Cantor CR, Ito T;  
XX XX WPI; 1996-076888/08.  
XX PT Isolating particular double stranded DNA - by formation of a triple helix  
XX PT and sepn. using a specific molecular recognition system and a solid  
XX PF carrier.



XX PS Claim 8; Col 21; 20pp; English.

XX CC The oligonucleotides AAT03687-9 are examples of probes used in a novel

CC DNA purification method designated triplex-affinity capture. The method

CC comprises binding an oligonucleotide probe to a double-stranded target

CC nucleic acid under conditions where a triple helix is formed. The probe

CC is attached directly or indirectly to the one half of a specific binding

CC pair e.g. biotin/avidin, antigen/antibody. The other half of the binding

CC pair is attached to an immobilising agent e.g. a bead. After formation of

CC the target-probe-binding pair-solid support complex, the target mol. can

CC be recovered by separating the complex from the medium and separating the

CC probe from the target nucleic acid. The method can be used to isolate

CC very large specific intact double strand DNA from a heterogeneous mix.

CC This primer was used in conjunction with a S.cerevisiae strain contg. a

CC triple helix sequence integrated into the LEU2 locus. Genomic DNA from

CC the strain was cloned into the plasmid pTZ19RG, a derivative of pTZ19R

CC contg. rare restriction endonuclease sites

XX SQ Sequence 24 BP; 0 A; 6 C; 0 G; 18 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 24;

Best Local Similarity 80.0%; Pred. No. 5.2e+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 2785 GAAAAAATAAATAAATAAATAA 2804

Db 22 GAAAAAGAAAGAAAGAAAGA 3

RESULT 5195

AAL42406/C

ID AAL42406 standard; DNA; 24 BP.

XX AC AAL42406;

XX DT 28-JUN-2002 (first entry)

XX DE Human ORC413-64 PCR primer 2.

XX KW Human; ss; replication initiation recognition complex subunit; ORC413.64;

XX KW cancer; HIV; PCR; primer.

XX OS Homo sapiens.

XX PN CN1327995-A.

XX PD 26-DEC-2001.

XX PF 12-JUN-2000; 2000CN-00116447.

XX PR 12-JUN-2000; 2000CN-00116447.

XX PA (BODE-) BODE GENE DEV CO LTD SHANGHAI.

XX PI Mao Y, Xie Y;

XX DR WPI; 2002-270050/32.

XX PT New polypeptide-replication initiation recognition complex subunit

PT ORC413.64 for treating diseases such as cancer, and human

PT immunodeficiency virus infection.

XX PS Example 2; Page 18 (Disclosure); 34pp; Chinese.

XX CC The invention comprises the amino acid and nucleotide sequences of the

CC human replication initiation recognition complex subunit ORC413.64. The

CC ORC413.64 nucleotide and protein sequences of the invention are useful

CC for treating diseases such as cancer and HIV. The present DNA sequence

CC represents a PCR primer specific for the gene sequence of the human

CC replication initiation recognition complex subunit ORC413.64

XX SQ Sequence 24 BP; 1 A; 4 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 24;

Best Local Similarity 80.0%; Pred. No. 5.2e+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 2785 GAAAAAATAAATAAATAAATAA 2804

Db 24 GAAAAAATCAAAAGAGAA 5

RESULT 5196

AAC96455/c

ID AAC96455 standard; DNA; 25 BP.

XX AC AAC96455;

XX DT 26-FEB-2001 (first entry)

XX DE HLA DQB1 gene PCR primer #7.

XX KW DNA sequence analysis; sequencing; protein sequence; protein structure;

XX KW gene typing; organ donation; bacteria identification; 16s rRNA; HLA;

XX KW human leukocyte antigen; PCR primer; ss.

XX OS Homo sapiens.

XX PN WO2000065088-A2.

XX PD 02-NOV-2000.

XX PF 20-APR-2000; 2000WO-EP003636.

XX PR 26-APR-1999; 99EP-00303215.

XX PA (AMSH ) AMERSHAM PHARMACIA BIOTECH AB.

XX PI Ulfendahl P, Wong K;

XX DR WPI; 2000-679677/66.

XX PT Identifying extendible primers for use in identification, or

PT classification of a nucleic acid of an organism, allele or gene such as

PT class 1/2 HLA comprises identifying all possible nucleotide sequences of

PT specific length.

XX PS Claim 14; Page 51; 66pp; English.

XX CC The present invention provides a method for identifying a set of

CC extendible primers which can be used in the identification, typing and

CC classification of genes. This can then be used to predict protein

CC sequence and structure, in organ donation to match the organ with the

CC receiver, and to identify bacteria in a sample. The method can be used to

CC type the human leukocyte antigen genes (HLA) and 16s rRNA genes in

CC particular

XX SQ Sequence 25 BP; 4 A; 2 C; 5 G; 14 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.6; DB 1; Length 25;

Best Local Similarity 80.0%; Pred. No. 5.3e+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 2778 TAGAATTGAAAAATAAATAA 2797

Db 20 TCGTAGTTAAAAATAAATAA 1

RESULT 5197

AAC96092

ID AAC96092 standard; DNA; 25 BP.

XX AC AAC96092;

XX DT 26-FEB-2001 (first entry)





XX PS Claim 11; Col 7-8; 6pp; English.

XX CC This invention describes a novel method for diagnosing adenocarcinoma and

CC determining metastatic ability of human cancer in an individual by

CC determining the increased levels of macrophage migration inhibitory

CC factor (MIF) within tumor cells. The method is useful for diagnosing

CC human adenocarcinoma, as well as for its prognosis. The method is also

CC useful for measuring levels of macrophage migration inhibitory factor

CC within tumor cells. The method provides better and more accurate

CC prognostic markers for cancer. The method is also capable of

CC distinguishing histological tumors from clinical cancers. This sequence

CC represents a primer used to detect the human MIF gene D5k region which is

CC described in the method of the invention

XX SQ Sequence 15 BP; 0 A; 1 C; 0 G; 14 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.4; DB 1; Length 15;

Best Local Similarity 93.3%; Pred. No. 2.9e+03;

Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2166 TTTT TTTT TTTT TTTT 2180

Db 1 TTTT TTTT TTTT TTTT 15

RESULT 5202

AAF60455

ID AAF60455 standard; DNA; 15 BP.

XX AC AAF60455;

XX 27-APR-2001 (first entry)

XX DE Oligonucleotide clamp #10.

XX KW Oligonucleotide clamp; ds.

XX OS Unidentified.

XX PN US6180777-B1.

XX PD 30-JAN-2001.

XX PF 03-JAN-1997; 97US-00787321.

XX PR 12-JAN-1996; 96US-0009918P.

XX PA (FARB ) BAYER CORP.

XX PI Horn T;

XX WPI; 2001-201911/20.

XX PT Synthesizing branched nucleic acids useful as diagnostic and molecular

PT probes, involves combining first units having haloalkylamino groups and

PT second units having thiol or phosphorothioate groups.

XX PS Example 5; Col 17-18; 20pp; English.

XX CC The present invention relates to a method for synthesising a branched or

CC multiply connected macromolecular structure, comprising oligonucleotide

CC clamps (OC). The macromolecular structure is capable of specifically

CC binding to a target molecule, and can therefore be used as probes. At

CC least one OC comprises a target binding sequence that binds specifically

CC and stably with the target molecule, and at least two OCs comprise signal

CC generation moieties capable of generating a detectable signal in the

CC presence of the target molecule. In addition the OCs are connected to one

CC another by thioalkylamino, or thiophosphorylalkylamino bridges. The

CC present sequence is an OC used in the present invention

XX SQ Sequence 15 BP; 1 A; 2 C; 0 G; 12 T; 0 U; 0 Other;

XX PS Query Match 0.5%; Score 13.4; DB 1; Length 15;

XX CC Best Local Similarity 93.3%; Pred. No. 2.9e+03;

XX CC Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2175 TTTT TTTT TTTT TTTT 2189

Db 1 TTTT TTTT TTTT TTTT 15

RESULT 5203

ABL57076/c

ID ABL57076 standard; DNA; 16 BP.

XX AC ABL57076;

XX 22-JUL-2002 (first entry)

XX DE Molecular beacon target sequence (single mismatch).

XX KW Molecular beacon; fluorophore; nanoparticle; nucleic acid detection; ss.

XX OS Synthetic.

XX FH Key Location/Qualifiers

FT misc\_feature 9

FT /\*tag= a

FT /note= "mismatch site"

XX PN WO200218951-A2.

XX PD 07-MAR-2002.

XX PF 29-AUG-2001; 2001WO-US041941.

XX PR 29-AUG-2000; 2000US-0228728P.

XX PR 30-MAR-2001; 2001US-0280350P.

XX PA (JYRQ ) UNIV ROCKEFELLER.

XX PI Dubertret B, Calame M, Libchaber A;

XX WPI; 2002-404569/43.

XX PT Sensitive detecting proximity changes in a system that utilizes an

PT interacting fluorophore and quencher, for high sensitivity applications,

PT involves utilizing a metal surface as quencher.

XX PS Example 3; Page 30; 62pp; English.

XX CC The present sequence is that of a single mismatch target sequence for a

CC molecular beacon comprising an oligonucleotide probe (see ABL57069)

CC covalently attached at the 3' end to fluorescent dye and at the 5' end to

CC a nanoparticle. In the native state, the probe forms a hairpin

CC conformation with hybridised termini. The proximity of the fluorophore

CC and quencher (gold nanoparticle) in the molecular beacon results in

CC little or no detectable fluorescence. Upon hybridisation of the central

CC complementary stretch of the probe to a target sequence, such as the

CC present sequence, the hairpin undergoes a conformational change resulting

CC in an increase in fluorescence, the extent of which is proportional to

CC the amount of target sequence present. Experiments with the present

CC sequence and a perfectly-matched target (see ABL57071) showed that

CC hybridisation was very specific to the matched target. The invention

CC relates generally to the use of metal surface quenchers such as particles

CC or films for high sensitivity applications in, for example, detection and

CC diagnostic systems

XX SQ Sequence 16 BP; 14 A; 1 C; 1 G; 0 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.4; DB 1; Length 16;

Best Local Similarity 93.3%; Pred. No. 3.3e+03;

Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2166 TTTT TTTT TTTT TTTT 2180



Db 16 TTTTGTGTTTTT 2

RESULT 5204  
AAD57846/c  
ID AAD57846 standard; DNA; 16 BP.  
XX  
AC AAD57846;  
XX  
DT 20-NOV-2003 (first entry)  
XX  
DE Target oligonucleotide #3 used in nonlinear optical technique.  
XX  
KW Nonlinear optical technique; screening; ss.  
XX  
OS Unidentified.  
XX  
PN WO2003064991-A2.  
XX  
PD 07-AUG-2003.  
XX  
PF 17-JUL-2002; 2002WO-US022681.  
XX  
PR 17-JUL-2001; 2001US-0306040P.  
PR 23-OCT-2001; 2001US-0347821P.  
PR 06-FEB-2002; 2002US-0354668P.  
XX  
PA (SALA/) SALAFSKY J S.  
XX  
PI Salafsky JS;  
XX  
DR WPI; 2003-646172/61.  
XX  
PT Screening candidate binding partner(s) for binding to test molecule by  
PT applying external force field to sample in homogeneous phase,  
PT illuminating sample with light beam(s) at fundamental frequencies, and  
PT measuring physical properties.  
XX  
PS Disclosure; Fig 20-B; 146pp; English.  
XX

CC The present invention relates to a method for detecting interactions  
CC between biological components using a nonlinear optical technique. The  
CC invention is used for screening candidate binding partner(s) for binding  
CC to test molecule. It can also be used to detect changes in orientation or  
CC conformation of the probe and/or target. The present sequence is a target  
CC oligonucleotide used in nonlinear optical technique  
XX  
SQ Sequence 16 BP; 14 A; 1 C; 1 G; 0 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.4; DB 1; Length 16;  
Best Local Similarity 93.3%; Pred. No. 3.3e+03;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2166 TTTTGTGTTTTT 2180  
Db 16 TTTTGTGTTTTT 2

RESULT 5205  
AAF03225/c  
ID AAF03225 standard; DNA; 17 BP.  
XX  
AC AAF03225;  
XX  
DT 16-FEB-2001 (first entry)  
XX  
DE Hammerhead ribozyme substrate #1520.  
XX  
KW Ribozyme; erythropoietin; granulocyte colony stimulating factor;  
KW interferon alpha; ss.  
XX  
OS Homo sapiens.

XX WO2000061729-A2.  
PN  
XX  
PD 19-OCT-2000.  
XX  
XX 11-APR-2000; 2000WO-US009721.  
PF  
XX  
XX 12-APR-1999; 99US-0129390P.  
PR  
XX (RIBO-) RIBOZYME PHARM INC.  
PA  
XX  
XX Blatt L, Zwick M, Pavco P, Mcswiggen J;  
PI  
XX WPI; 2000-647423/62.  
DR  
XX Enzymatic and antisense nucleic acid inhibition of repressor genes,  
PT useful for producing e.g. granulocyte colony stimulating factor protein,  
PT interferon alpha and erythropoietin.  
XX  
XX Claim 37; Page 90; 164pp; English.  
PS  
XX The present invention relates to enzymatic and antisense nucleic acid  
CC molecules that act as inhibitors of the expression of repressor genes  
CC encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription  
CC factor gene, IRF-2 and/or the CAATT Displacement Protein (CDP).  
CC Inhibition of the repressors removes prevents inhibition (and  
CC consequently increases expression of) genes involved in the production of  
CC erythropoietin, granulocyte colony stimulating factor protein and  
CC interferon alpha  
XX  
SQ Sequence 17 BP; 3 A; 0 C; 2 G; 12 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 93.3%; Pred. No. 3.7e+03;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2782 ATTGAAAAA 2796  
Db 16 ATTCAAAAA 2

RESULT 5206  
AAF03224/c  
ID AAF03224 standard; DNA; 17 BP.  
XX  
AC AAF03224;  
XX  
DT 16-FEB-2001 (first entry)  
XX  
DE Hammerhead ribozyme substrate #1519.  
XX  
KW Ribozyme; erythropoietin; granulocyte colony stimulating factor;  
KW interferon alpha; ss.  
XX  
OS Homo sapiens.  
XX  
XX WO2000061729-A2.  
PN  
XX  
PD 19-OCT-2000.  
XX  
PF 11-APR-2000; 2000WO-US009721.  
XX  
XX 12-APR-1999; 99US-0129390P.  
PR  
XX (RIBO-) RIBOZYME PHARM INC.  
PA  
XX Blatt L, Zwick M, Pavco P, Mcswiggen J;  
PI  
XX WPI; 2000-647423/62.  
DR  
XX Enzymatic and antisense nucleic acid inhibition of repressor genes,  
PT useful for producing e.g. granulocyte colony stimulating factor protein,  
PT interferon alpha and erythropoietin.



RESULT 5209  
AAC82922/c  
ID AAC82922 standard; DNA; 20 BP.  
XX  
AC AAC82922;  
XX  
DT 21-MAR-2001 (first entry)  
XX  
DE Human S-9 derived oligonucleotide #6.  
XX  
KW Recognition system; screening; identification; pharmaceutical; toxin;  
KW plant protection agent; toxin; venom; carcinogen; venom; teratogen;  
KW herbicide; fungicide; pesticide; beta-actin; human; ss.  
XX  
OS Homo sapiens.  
XX  
PN DE19923966-A1.  
XX  
PD 30-NOV-2000.  
XX  
PF 25-MAY-1999; 99DE-01023966.  
XX  
PR 25-MAY-1999; 99DE-01023966.  
XX  
PA (AVET ) AVENTIS RES & TECHNOLOGIES GMBH & CO KG.  
XX  
PI Boekenkamp D, Hoppe H, Burgstaller P;  
XX  
DR WPI; 2001-050938/07.  
XX  
PT Recognition system, e.g. for identifying nucleic acids, comprises at  
PT least one recognition unit comprising a region with a defined structure  
PT adjacent to a region with a randomized structure.  
XX  
PS Example; Fig 1; 8pp; German.  
XX  
CC This invention describes a novel recognition system comprising at least 1  
CC recognition unit bound to a support, each recognition unit comprising a  
CC region A with a defined structure adjacent to a region B with a  
CC randomized structure. The recognition system is useful for screening,  
CC identifying, or characterizing at least 1 component of a sample,  
CC especially nucleic acids and/or proteins, and for screening for and/or  
CC identifying cellular or synthetic binding partners, preferably proteins,  
CC peptides, nucleic acids, chemical agents, preferably organic compounds,  
CC pharmaceuticals, plant protection agents, toxins, venoms, carcinogens,  
CC teratogens, herbicides, fungicides or pesticides  
XX  
SQ Sequence 20 BP; 2 A; 3 C; 2 G; 13 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.4; DB 1; Length 20;  
Best Local Similarity 93.3%; Pred. No. 4.7e+03;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 2783 TTGAAAAA 2797  
DB 15 TTA 1

RESULT 5210  
AAF87713/c  
ID AAF87713 standard; DNA; 20 BP.  
XX  
AC AAF87713;  
XX  
DT 06-JUL-2001 (first entry)  
XX  
DE Human glutathione S-transferase pi promoter (GSTP1) PCR primer N-F1.  
XX  
KW Human; glutathione S-transferase pi; GSTP1; CpG island; diagnosis;  
KW hepatic cell proliferative disorder; liver cancer; anticancer;  
KW tumorigenesis; detection; PCR primer; ss.

XX Homo sapiens.  
OS  
XX WO200126536-A2.  
PN  
XX 19-APR-2001.  
PD  
XX 12-OCT-2000; 2000WO-US028427.  
PF  
XX 13-OCT-1999; 99US-0159168P.  
PR  
XX (UYJO ) UNIV JOHNS HOPKINS SCHOOL MEDICINE.  
PA  
XX Nelson WG, Lin X, Tchou JC, Bakker J;  
PI  
XX WPI; 2001-290647/30.  
DR  
XX Detecting hepatic cell proliferative disorder useful for detecting  
XX hepatocellular carcinoma comprises detecting a methylated CpG-containing  
PT glutathione-S-transferase nucleic acid.  
PT  
XX Claim 83; Page 42; 64pp; English.  
PS  
XX The present invention describes a method for detecting hepatic cell  
CC proliferative disorders. The method comprises detecting a methylated CpG-  
CC containing glutathione-S-transferase (GST) nucleic acid (I) in a hepatic  
CC specimen or a biological fluid, where a methylated GST nucleic acid is  
CC indicative of a hepatic cell proliferative disorder. The method can be  
CC used to diagnose hepatocellular carcinoma, and to monitor progress of its  
CC treatment. Increasing the level of GST is useful in the treatment of  
CC liver cancer, in humans or animals. The method can detect the early  
CC stages of tumorigenesis in liver cells simply. The present sequence  
CC represents a PCR primer which is used in the amplification of the human  
CC glutathione S-transferase pi gene (GSTP1) promoter in an example from the  
CC present invention for mapping somatic GSTP1 CpG island DNA  
CC hypermethylation changes by genomic sequencing after bisulfite treatment  
XX  
SQ Sequence 20 BP; 4 A; 0 C; 2 G; 14 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.4; DB 1; Length 20;  
Best Local Similarity 93.3%; Pred. No. 4.7e+03;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 2783 TTGAAAAA 2797  
DB 19 TTA 5

RESULT 5211  
AAQ52305/c  
ID AAQ52305 standard; cDNA; 20 BP.  
XX  
AC AAQ52305;  
XX  
DT 25-MAR-2003 (revised)  
DT 03-JUN-1994 (first entry)  
XX  
DE FKBP12C PCR primer VX10201.  
XX  
KW Transplant rejection; monitoring; FK506 immunosuppressant therapy;  
KW tissue specific; polymerase chain reaction; ss.  
XX  
OS Synthetic.  
XX  
PN WO9323548-A2.  
XX  
PD 25-NOV-1993.  
XX  
PF 20-MAY-1993; 93WO-US004916.  
XX  
PR 20-MAY-1992; 92US-00886611.  
XX  
PA (VERT-) VERTEX PHARM INC.

XX Peattie DA;  
PI WPI; 1993-386579/48.  
XX  
DR  
XX  
XX  
PT New cDNA for tissue specific FK506 binding proteins - and detection of  
PT its mRNA to monitor transplant rejection and effect or FK506  
PT immunosuppressant therapy.  
XX  
XX Example 4; Page 35; 54pp; English.  
PS  
XX The sequence is that of a PCR primer VX10201 which was used to amplify  
CC DNA specific to FKBP12C. (Updated on 25-MAR-2003 to correct PN field.)  
CC  
XX  
SQ Sequence 20 BP; 1 A; 11 C; 6 G; 2 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.4; DB 1; Length 20;  
Best Local Similarity 93.3%; Pred. No. 4.7e+03;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
  
QY 59 GCGCGCGCGGACGC 73  
Db 20 GCGCGCGCGGACGC 6  
  
RESULT 5212  
ABZ94127  
ID ABZ94127 standard; DNA; 20 BP.  
XX  
AC ABZ94127;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human oligonucleotide sequence.  
XX  
KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiqunone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
XX  
OS Homo sapiens.  
XX  
PN WO200285308-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013135.  
XX  
PR 24-APR-2001; 2001US-0286137P.  
XX  
PA (EPIG-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
DR WPI; 2003-229219/22.  
XX  
XX Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiqunone.  
XX  
PS Disclosure; SEQ ID NO 9369; 872pp; English.  
XX  
CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiqunone. A composition of the invention

CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiqunone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 14 A; 1 C; 3 G; 1 T; 0 U; 1 Other;  
  
Query Match 0.5%; Score 13.4; DB 1; Length 20;  
Best Local Similarity 87.5%; Pred. No. 4.7e+03;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 2782 ATTGAAAAAATAAAAA 2797  
Db 5 AGTCAAAAAAATAAAAA 20  
  
RESULT 5213  
AAF87033/C  
ID AAF87033 standard; DNA; 21 BP.  
XX  
AC AAF87033;  
XX  
DT 18-SEP-2001 (first entry)  
XX  
DE Anchored 3' oligo dT12 primer.  
XX  
KW Sequencing primer; definitive ectoderm equivalent cell; DEE cell;  
KW cell preparation; early primitive ectoderm-like cell; EPL cell; human;  
KW cell therapy; gene therapy; neuroectoderm cell; organ transplant;  
KW neurodegenerative disease; Parkinson's disease; Alzheimer's disease;  
KW stroke; spinal cord injury; therapy; ss.  
XX  
OS Synthetic.  
XX  
PN WO200151610-A1.  
XX  
PD 19-JUL-2001.  
XX  
PF 12-JAN-2001; 2001WO-AU0000029.  
XX  
PR 14-JAN-2000; 2000AU-00005098.  
PR 20-APR-2000; 2000AU-00007045.  
PR 27-APR-2000; 2000AU-00007143.  
XX  
PA (BRES-) BRESAGEN LTD.  
PA (LONG/) LONG C L O.  
XX  
PI Long CLO, Rathjen PD, Rathjen J;  
XX  
DR WPI; 2001-432907/46.  
XX  
PT Preparing (M1) definitive ectoderm equivalent (DEE) cells in vitro for  
PT treatment of Parkinson's and Alzheimers comprises culturing early  
PT primitive ectoderm-like cells in conditioned medium.  
XX  
PS Example; Page 37; 116pp; English.  
XX  
CC This sequence represents a sequencing primer used within the scope of the  
CC invention. The invention relates to a method for preparing definitive  
CC ectoderm equivalent (DEE) cells in vitro comprising providing: (a) early  
CC primitive ectoderm-like (EPL) cells; and (b) a conditioned medium or  
CC extract exhibiting neural inducing properties and culturing the EPL cells  
CC for a time to permit controlled differentiation to DEE cells. The DEE  
CC cells, or their differentiated or partially differentiated progeny are



CC useful in human cell therapy or transgenic animal production and for use  
CC in human or animal gene therapy. The method is useful for preparing DEE  
CC cells in vitro. It can also be used for selectively producing  
CC neuroectoderm cells or surface ectoderm cells from DEE cells. The method  
CC can also be used to produce genetically modified DEE cells. It is also  
CC useful for preparing tissues or organ for transplant. The cells are  
CC useful for treating and curing neurodegenerative diseases such as  
CC Parkinson's disease and Alzheimer's disease and pathological conditions  
CC such as stroke and spinal cord injury by replacing or assisting the  
CC function of normal disease tissues. They are also useful for the  
CC treatment of corneal disorders. The methods are useful for producing  
CC cells as a source for reprogramming and for use in pharmaceutical or  
CC toxicological screening

XX  
SQ Sequence 21 BP; 4 A; 1 C; 1 G; 15 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.4; DB 1; Length 21;  
Best Local Similarity 93.3%; Pred. No. 5e+03;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2786 AAAAAAAAAAAAAA 2800  
|||:|||||  
Db 20 AAAAAAAAAAAGAA 6

RESULT 5214  
AAF80105  
ID AAF80105 standard; DNA; 21 BP.  
XX  
AC AAF80105;  
XX  
DT 11-JUN-2001 (first entry)  
XX  
DE Nucleotide sequence of a polymorphism site in a target gene.  
XX  
KW Gene inhibitor; cancer; allele specific inhibitor;  
KW proliferative disorder; ss.  
XX  
OS Homo sapiens.  
XX  
PN US6200754-B1.  
XX  
PD 13-MAR-2001.  
XX  
PF 19-MAR-1998; 98US-00045054.  
XX  
PR 19-MAR-1998; 98US-00045054.  
XX  
PA (VARI-) VARIAGENICS INC.  
XX  
PI Housman DE, Ledley FD, Stanton VP;  
XX  
DR WPI; 2001-256468/26.  
XX  
PT Identifying inhibitor active on conditionally essential gene (EG) subject  
PT to loss of heterozygosity in cancer, useful in cancer treatment, involves  
PT determining two alleles of EG and testing potential allele specific  
PT inhibitor.

XX  
PS Disclosure; Fig 2; 43pp; English.

XX  
CC The specification describes a method for identifying inhibitors active on  
CC conditionally essential genes subject to loss of heterozygosity in  
CC cancer. The method involves determining two alleles of the essential  
CC gene, testing potential allele specific inhibitors to determine whether  
CC the inhibitor is active on at least one but less than all of alleles. The  
CC inhibitors suppress either the synthesis or the biological activity of  
CC the target allelic gene product. The inhibitors are useful for treating  
CC or preventing cancer or other proliferative disorders in a patient. They  
CC are also useful for inhibiting growth of a cell by subjecting the cell to  
CC conditions such that the gene is essential and administering an inhibitor  
CC active on an allele of the conditionally essential gene. Use of allele  
CC specific inhibitors allows specific killing or reduction of growth of

CC cancer cells. AAF80072-AAF80115 represent the sequences around  
CC polymorphism sites of various target genes  
XX  
SQ Sequence 21 BP; 14 A; 3 C; 1 G; 2 T; 0 U; 1 Other;

Query Match 0.5%; Score 13.4; DB 1; Length 21;  
Best Local Similarity 82.4%; Pred. No. 5e+03;  
Matches 14; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 2786 AAAAAAAAAAAAAA 2802  
|||:|||||  
Db 5 AACATAAAAAAAAAAA 21

RESULT 5215  
ABL57072/c  
ID ABL57072 standard; DNA; 21 BP.  
XX  
AC ABL57072;  
XX  
DT 22-JUL-2002 (first entry)  
XX  
DE Molecular beacon target sequence (single mismatch).  
XX  
KW Molecular beacon; fluorophore; nanoparticle; nucleic acid detection; ss.  
XX  
OS Synthetic.  
XX  
FH Key Location/Qualifiers  
FT misc\_feature 9 /\*tag= a  
FT /note= "mismatch site"  
XX  
PN WO200218951-A2.  
XX  
PD 07-MAR-2002.  
XX  
PF 29-AUG-2001; 2001WO-US041941.  
XX  
PR 29-AUG-2000; 2000US-0228728P.  
PR 30-MAR-2001; 2001US-0280350P.  
XX  
PA (UYRQ ) UNIV ROCKEFELLER.  
XX  
PI Dubertret B, Calame M, Libchaber A;  
XX  
DR WPI; 2002-404569/43.  
XX  
PT Sensitive detecting proximity changes in a system that utilizes an  
PT interacting fluorophore and quencher, for high sensitivity applications,  
PT involves utilizing a metal surface as quencher.

XX  
PS Example 3; Page 62; 62pp; English.

XX  
CC The present sequence is that of a single mismatch target sequence for a  
CC molecular beacon comprising an oligonucleotide probe (see ABL57069)  
CC covalently attached at the 3' end to fluorescent dye and at the 5' end to  
CC a nanoparticle. In the native state, the probe forms a hairpin  
CC conformation with hybridised termini. The proximity of the fluorophore  
CC and quencher (gold nanoparticle) in the molecular beacon results in  
CC little or no detectable fluorescence. Upon hybridisation of the central  
CC complementary stretch of the probe to a target sequence, such as the  
CC present sequence, the hairpin undergoes a conformational change resulting  
CC in an increase in fluorescence, the extent of which is proportional to  
CC the amount of target sequence present. Experiments with the present  
CC sequence and a perfectly-matched target (see ABL57071) showed that  
CC hybridisation was very specific to the matched target. The invention  
CC relates generally to the use of metal surface quenchers such as particles  
CC or films for high sensitivity applications in, for example, detection and  
CC diagnostic systems

XX  
SQ Sequence 21 BP; 14 A; 4 C; 2 G; 1 T; 0 U; 0 Other;

```

Query Match      0.5%; Score 13.4; DB 1; Length 21;
Best Local Similarity 93.3%; Pred. No. 5e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2166 TTTT TTTT TTTT TTTT 2180
Db 16 TTTT TTTG TTTT TTTT 2

RESULT 5216
ABS58234
ID ABS58234 standard; DNA; 21 BP.
XX
AC ABS58234;
XX
DT 05-FEB-2003 (first entry)
XX
DE Sequence surrounding polymorphism target 1539.21.
XX
KW Cancer; ss; single nucleotide polymorphism; human; SNP; CEG; LOH;
KW conditionally essential gene; alternative allele; loss of heterozygosity;
KW antiproliferative treatment; glutamate-ammonia ligase; chromosome 1q31.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT variation 11
FT /*tag= a
FT /standard_name= "Single nucleotide polymorphism"
XX
PN US2002127714-A1.
XX
PD 12-SEP-2002.
XX
PF 14-FEB-2001; 2001US-00782837.
XX
PR 19-MAR-1998; 98US-00045054.
XX
PA (VARI-) VARIAGENICS INC.
XX
PI Housman DE, Ledley FD, Stanton VP;
XX
WPI; 2003-066906/06.
XX
PT Inhibitor for treating cancer, is active on allelic form of conditionally
PT essential gene which has two alternative alleles in a population, and
PT targets alternative alleles.
XX
PS Disclosure; Fig 2; 47pp; English.
XX
CC The invention relates to an inhibitor which is active on an allelic form
CC of a conditionally essential gene (CEG) comprising at least two
CC alternative alleles in a population, and where the inhibitor targets at
CC least one but less than all of the alternative alleles. Also included
CC are: (1) a method of identifying an inhibitor potentially useful for
CC treatment of cancer, where the inhibitor is active on CEG, and where the
CC gene is subject to loss of heterozygosity in a cancer, involves
CC determining at least two alleles of the gene, testing potential allele
CC specific inhibitor (AI) to determine whether potential AI is active on
CC alleles; (2) identifying a potential patient for treatment with an
CC inhibitor active on alleles of CEG, where the patient is suffering from
CC cancer, involves: (a) identifying a patient heterozygous for the gene, or
CC (b) determining whether cancer cells in the patient have undergone loss
CC of heterozygosity (LOH) of the gene; (3) a nucleic acid probe of at least
CC 12 nucleotides in length which is perfectly complementary to a portion of
CC a first allelic form of CEG (but not a second), where the portion
CC comprises a sequence variance site; and (4) selecting a patient for
CC treatment with an antiproliferative treatment, or selecting an
CC antiproliferative treatment for a patient suffering from a cancer,
CC involves determining whether normal somatic cells in a potential patient
CC are heterozygous for an essential or CEG (which reduces the sensitivity
CC of the cells to antiproliferative treatment), where a first allelic form
CC of the gene is more active than a second allelic form, and determining
CC whether cancer cells of the patient have only the second allelic form of
CC the gene, where if the somatic cells are heterozygous and the cancer
CC cells have only the second allelic form, it is indicative that the
CC patient is suitable for treatment with the antiproliferative treatment or
CC the antiproliferative treatment is suitable for the patient. The methods
CC of the invention are useful for preventing development of cancer in a
CC patient having a precancerous condition, for treating a patient suffering
CC from a cancer, where the patient is heterozygous for CEG, for inhibiting
CC growth of a cell (involves subjecting the cell to conditions such that
CC the gene is essential, and administering at least one inhibitor active on
CC an allele of CEG). The method inhibits proliferation or kills cells which
CC have undergone LOH of genes that are not inhibited by the drug and
CC contain only an allelic form of the essential gene, its RNA transcript,
CC or its protein product against which the inhibitor is targeted, under the
CC appropriate altered conditions, recognises more than one linked sequence
CC variances within a specific allele, and discriminates between two allelic
CC forms due to a particular single sequence variance between allelic forms
CC of the target gene. The present sequence shows the sequence surrounding a
CC polymorphism in an allele of the target gene, glutamate-ammonia ligase
CC (chromosome 1q31)
XX
SQ Sequence 21 BP; 14 A; 3 C; 1 G; 2 T; 0 U; 1 Other;

Query Match      0.5%; Score 13.4; DB 1; Length 21;
Best Local Similarity 82.4%; Pred. No. 5e+03;
Matches 14; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 2786 AAAAAA AAAAAA AAAAAA 2802
Db 5 AACATA AAAAAA AAAAAA 21

RESULT 5217
AAT42561
ID AAT42561 standard; cDNA; 21 BP.
XX
AC AAT42561;
XX
DT 14-JAN-1997 (first entry)
XX
DE 3' primer #1087-1107 for DHPS:chloroplast transit peptide fusion protein.
XX
KW Dihydrodipicolinic acid synthase; DHPS; chloroplast transit peptide; PCR;
KW chloroplast; maize; L-Lysine; recombinant plant; nutrition; grain crop;
KW forage plant; clover; fescue; alfalfa; processed plant; tomatoe; lupin;
KW soyabean; feed; food; food additive; polymerase chain reaction; primer;
KW amplify; ss.
XX
OS Synthetic.
XX
PN US5545545-A.
XX
PD 13-AUG-1996.
XX
PF 27-APR-1993; 93US-00053867.
XX
PR 27-APR-1993; 93US-00053867.
XX
PA (MINU ) UNIV MINNESOTA.
XX
PI Sellner JM, Somers DA, Bittel DC, Gengenbach BG, Shaver JM;
XX
WPI; 1996-383670/38.
XX
PT DNA encoding maize di:hydro:di:picolinic acid synthase mutant - resistant
PT to feedback inhibition by lysine.
XX
PS Example 7; Col 20; 35pp; English.
XX
CC AAT42552-T42561 represent amplification primers for the recombinant DNA
CC sequence used in the method of the invention. The method of the invention
CC is for increasing the level of L-Lysine in a plant. In the method, a
CC recombinant DNA sequence is introduced into the cells of a plant tissue
```

CC source. The recombinant sequence comprises an altered mature Zea mays  
CC dihydrodipicolinic acid (DHPS) sequence (see AAT42547) which is  
CC substantially resistant to feedback inhibition by endogenously produced  
CC free L-Lysine, and a second sequence which encodes a chloroplast transit  
CC sequence (see AAT42549). The DHPS used has at least one amino acid  
CC alteration contained within residues 100-125, and is more than 400 times  
CC less sensitive to lysine than wild-type DHPS. The chloroplast transit  
CC sequence localises the altered mature DHPS in the chloroplasts of the  
CC plant cells. The transfected plant cells are then used to generate plants  
CC expressing the recombinant DNA in their cells. The plants regenerated  
CC from the transformed cells have increased levels of free L-Lysine, which  
CC improves their nutritional value. The plants which can be improved by  
CC this transformation include maize and other grain crops, forage plants  
CC (such as clover, fescue, and alfalfa), and processed plants (such as  
CC tomatoes, soyabeans and lupins). The plants can be used directly as feed  
CC or food, or the L-Lysine can be extracted for use as a feed or food  
CC additive  
SQ Sequence 21 BP; 3 A; 7 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.4; DB 1; Length 21;  
Best Local Similarity 93.3%; Pred. No. 5e+03;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 654 AGAACCTGGGCTCC 668  
Db 2 AGAACCTGGGCTCC 16  
|||||

RESULT 5218  
AAZ26403  
ID AAZ26403 standard; DNA; 21 BP.

XX AAZ26403;

DT 30-NOV-1999 (first entry)

DE Human polymorphic region 592.

XX Polymorphism; human; inhibitor; cancer; treatment; cell growth; LOH;  
KW cell viability; loss of heterozygosity; precancerous condition; ASI;  
KW allele specific inhibitor; somatic cell; diagnosis; prevention;  
KW atherosclerotic plaque; premalignant metaplastic lesion; endometriosis;  
KW dysplastic lesion; benign tumour; polycystic kidney disease; transplant;  
KW graft versus host disease; malignant cell removal; bone marrow; ss.

XX Homo sapiens.

XX WO9841648-A2.

PD 24-SEP-1998.

XX 19-MAR-1998; 98WO-US005419.

XX 20-MAR-1997; 97US-0041057P.

XX (VARI-) VARIAGENICS INC.

PI Housman D, Ledley FD, Stanton VP;

XX WPI; 1998-521232/44.

XX Identifying target genes for allele-specific drugs - used for diagnosis,  
PT prevention and treatment of, e.g. cancers, atherosclerotic plaque,  
PT dysplastic lesions, endometriosis or graft versus host disease.

PS Disclosure; Fig 7; 605pp; English.

XX This invention describes a novel method for identifying an inhibitor  
CC potentially useful for treatment of cancer, where the inhibitor is active  
CC on a gene vital for cell growth or viability, and where the gene is  
CC subject to loss of heterozygosity (LOH) in a cancer. The inhibitor is  
CC used for preventing the development of cancer in a patient having a

CC precancerous condition, by administering to the patient a first allele  
CC specific inhibitor (ASI) targeted to an allele of a first essential gene  
CC present in cells of the precancerous condition, where the normal somatic  
CC cells of the patient are heterozygous for the first gene, the inhibitor  
CC is active on at least one but less than all allelic forms of the gene  
CC present in a population and targets only one allelic form present in the  
CC normal somatic cells, and the first gene. The products and methods can be  
CC used in the diagnosis, prevention and treatment of LOH disorders, e.g.  
CC cancers, atherosclerotic plaques, premalignant metaplastic or dysplastic  
CC lesions, benign tumours, endometriosis, polycystic kidney disease, and  
CC graft versus host disease. The method can also be used to remove  
CC malignant cells from bone marrow transplants. AAZ25812-Z26825 represent  
CC human polymorphic sites described in the method of the invention  
XX  
SQ Sequence 21 BP; 12 A; 2 C; 0 G; 7 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.4; DB 1; Length 21;  
Best Local Similarity 93.3%; Pred. No. 5e+03;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2783 TTGAAAAA 2797  
Db 7 TTTAAAAA 21  
|||||

RESULT 5219  
ABA04964/c  
ID ABA04964 standard; DNA; 24 BP.

XX ABA04964;

DT 01-MAR-2002 (first entry)

DE Human FD14 PCR primer #1.

XX Human; FD14; tumour; embryo maldevelopment; tissue; cytostatic;  
KW immunodeficiency disease; immune disease; immunomodulatory; gene therapy;  
KW PCR primer; ss.

XX Homo sapiens.

XX CN1312286-A.

XX 12-SEP-2001.

XX 07-MAR-2000; 2000CN-00111937.

XX 07-MAR-2000; 2000CN-00111937.

XX (BODE-) BODE GENE DEV CO LTD SHANGHAI.

XX Mao Y, Xie Y;

XX WPI; 2002-018504/03.

XX Human FD14 polypeptides and polynucleotides encoding it.

XX Example 2; Page 16 (Disclosure); 32pp; Chinese.

XX The present invention relates to human FD14 (AAM47799). FD14 and its  
CC coding sequence are useful for treating several diseases, such as  
CC malignant tumours, embryo and tissue maldevelopment, immunodeficiency  
CC diseases, various acquired and hereditary disease and immune disease. The  
CC present sequence is a PCR primer, which was used in an example from the  
CC present invention  
XX

XX Sequence 24 BP; 0 A; 6 C; 16 G; 2 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.4; DB 1; Length 24;  
Best Local Similarity 73.9%; Pred. No. 5.4e+03;  
Matches 17; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

QY 409 AGCGTAGCCGCCCATCAACC 431

Db 23 AGCCGCCGCCGCCGCCGCCACCC 1

RESULT 5220  
AAC96197/c  
ID AAC96197 standard; DNA; 25 BP.

XX AC AAC96197;  
XX DT 26-FEB-2001 (first entry)  
XX DE 16s rRNA gene PCR primer #164.  
XX KW DNA sequence analysis; sequencing; protein sequence; protein structure;  
KW gene typing; organ donation; bacteria identification; 16s rRNA; HLA;  
KW human leukocyte antigen; PCR primer; ss.

OS Homo sapiens.  
XX WO200065088-A2.  
XX PD 02-NOV-2000.  
XX PF 20-APR-2000; 2000WO-EP003636.  
XX PR 26-APR-1999; 99EP-00303215.  
XX PA (AMSH ) AMERSHAM PHARMACIA BIOTECH AB.  
XX PI Ulfendahl P, Wong K;  
XX DR WPI; 2000-679677/66.  
XX PT Identifying extendible primers for use in identification, or  
PT classification of a nucleic acid of an organism, allele or gene such as  
PT class 1/2 HLA comprises identifying all possible nucleotide sequences of  
PT specific length.

XX Claim 14; Page 47; 66pp; English.

PS The present invention provides a method for identifying a set of  
XX extendible primers which can be used in the identification, typing and  
XX classification of genes. This can then be used to predict protein  
XX sequence and structure, in organ donation to match the organ with the  
XX receiver, and to identify bacteria in a sample. The method can be used to  
XX type the human leukocyte antigen genes (HLA) and 16s rRNA genes in  
XX particular

XX Sequence 25 BP; 5 A; 1 C; 5 G; 14 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.4; DB 1; Length 25;  
Best Local Similarity 93.3%; Pred. No. 5.4e+03;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2783 TTGAAAAA 2797  
Db 15 TCGAAAAA 1

RESULT 5221  
ABS75770  
ID ABS75770 standard; DNA; 25 BP.  
XX AC ABS75770;  
XX DT 27-DEC-2002 (first entry)  
XX DE Human PAPP-Ea associated 25-mer SEQ ID 1296.  
XX KW PAPP-E; human; pregnancy associated plasma protein E; abortive;  
KW contraceptive; gene therapy; vaccine; pregnancy; antenatal; diagnosis;  
KW dysgenetic pregnancy; primer; ss.

XX OS Homo sapiens.  
XX PN US2002102252-A1.  
XX PD 01-AUG-2002.  
XX PF 06-APR-2001; 2001US-00827998.  
XX PR 26-MAY-2000; 2000US-0207456P.  
XX PA (GUY/) GU Y.  
XX PA (SHAN/) SHANNON M E.  
XX PI Gu Y, Shannon ME;  
XX DR WPI; 2002-697817/75.  
XX PT New isolated nucleic acid encoding an isoform of human pregnancy  
XX associated plasma protein E, for preventing or aborting pregnancy.  
XX Example 2; Page 245; 353pp; English.

CC This invention describes a novel isolated nucleic acid that encodes one  
CC of three new isoforms of human pregnancy associated plasma protein E,  
CC hPAPP-E. The products of the invention have abortive and contraceptive  
CC activity and can be used for gene therapy or in a vaccine. The nucleic  
CC acid, polypeptide encoded by it, or antibody to the polypeptide can be  
CC used in pharmaceutical compositions or vaccines for preventing or  
CC aborting pregnancy. PAPP-E is used in the antenatal diagnosis of  
CC dysgenetic pregnancies. The nucleic acids are used as probes to assess  
CC the level of PAPP-E isoform mRNA in chorionic villus samples, and the  
CC antibodies can be used to assess the expression levels of PAPP-E isoform  
CC proteins in chorionic villus samples, to diagnose dysgenetic pregnancies  
CC antenatally. This sequence represents an oligomer used in scanning the  
CC human PAPP-E genes described in the disclosure of the invention

XX Sequence 25 BP; 16 A; 0 C; 9 G; 0 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.4; DB 1; Length 25;  
Best Local Similarity 73.9%; Pred. No. 5.4e+03;  
Matches 17; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

QY 2779 AGAATTGAAAAA 2801  
Db 2 AGAAGGGGGGAAAAAAGAAA 24

RESULT 5222  
AAX87332/c  
ID AAX87332 standard; DNA; 18 BP.  
XX AC AAX87332;  
XX DT 27-SEP-1999 (first entry)  
XX DE Reverse transcription primer P1.  
XX KW SAG gene; sensitive to apoptosis; mouse; cancer; tumour;  
KW neurodegenerative disease; muscular dystrophy; wound healing; vulneryary;  
KW therapy; PCR; primer; ss.  
XX OS Synthetic.  
XX PN WO9932514-A2.  
XX PD 01-JUL-1999.  
XX PF 15-DEC-1998; 98WO-US026705.  
XX PR 19-DEC-1997; 97US-0068179P.  
XX PR 11-SEP-1998; 98US-0099840P.



PA (WARN ) WARNER LAMBERT CO.  
XX  
PI Sun Y;  
XX  
XX WPI; 1999-430152/36.  
XX  
XX SAG: Sensitive to Apoptosis Gene and related proteins, useful for  
PT promoting cell growth and protecting cells against apoptosis.  
PT  
XX  
XX Example 1; Page 14; 84pp; English.  
PS  
XX This primer was used for reverse transcription of RNA isolated from mouse  
CC tumour lines L-RT101 (epidermal tumour cell line) and H-Tx (spontaneously  
CC transformed liver line). It was also used as the reverse primer in PCR  
CC amplification of the resulting cDNA. Primers P1 and P2 (see AAX87333)  
CC reproducibly detected differential expression of a gene between 1,10-  
CC phenanthroline (OP)-treated and OP-nontreated L-RT101 and H-Tx cells. An  
CC OP-inducible clone was used as a probe to isolate a full-length clone  
CC (see AAX87313) corresponding to the mouse sensitive to apoptosis gene  
CC (SAG). SAG is a redox-sensitive, haem-binding protein domain that  
CC promotes cell growth, protects cells from apoptosis, scavenges oxygen  
CC radicals and can be used for the reversion of a tumour phenotype  
XX  
SQ Sequence 18 BP; 2 A; 1 C; 1 G; 13 T; 0 U; 1 Other;  
  
Query Match 0.5%; Score 13.2; DB 1; Length 18;  
Best Local Similarity 92.9%; Pred. No. 4.3e+03;  
Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;  
  
QY 2785 GAAAAAAAAAAAAA 2798  
Db 18 BAAAAAAAAAAAAA 5  
  
RESULT 5223  
AAX15198/C  
ID AAX15198 standard; DNA; 18 BP.  
XX  
AC AAX15198;  
XX  
XX 25-MAR-2003 (revised)  
DT 28-APR-1999 (first entry)  
XX  
XX Triple helix forming oligonucleotide.  
DE  
XX Double-stranded DNA; triple helix; quinoline;  
KW quinazoline-based structure; hydrogen bonding; ss.  
XX  
XX Synthetic.  
XX  
XX WO9623777-A1.  
XX  
XX 08-AUG-1996.  
XX  
XX 29-JAN-1996; 96WO-US001473.  
XX  
XX 01-FEB-1995; 95US-00384324.  
XX  
XX (UYNE-) UNIV NEBRASKA.  
XX  
XX Gold BI;  
XX  
XX WPI; 1996-371338/37.  
XX  
XX 08-AUG-1996.  
XX  
XX 29-JAN-1996; 96WO-US001473.  
XX  
XX 01-FEB-1995; 95US-00384324.  
XX  
XX (UYNE-) UNIV NEBRASKA.  
XX  
XX Gold BI;  
XX  
XX WPI; 1996-371338/37.  
XX  
XX New substd. quinoline and quinazoline cpds. - are monomers for triple  
PT helix-forming oligo:nucleotide analogues useful e.g. for treating tumours  
PT or viral infection.  
XX  
XX Disclosure; Fig 2; 102pp; English.  
PS  
XX  
XX The present sequence represents a triple helix forming oligonucleotide  
CC that form a triple helix with the double-stranded DNA sequence described  
CC in AAX15197. The specification describes novel monomeric compositions

CC which are substituted quinoline or quinazoline-based structures capable  
CC of hydrogen bonding specifically with interstrand purine-pyrimidine pairs  
CC in a double stranded Watson-Crick DNA molecule to form a triple-helix.  
CC (Updated on 25-MAR-2003 to correct PF field.)  
XX  
SQ Sequence 18 BP; 0 A; 3 C; 0 G; 15 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.2; DB 1; Length 18;  
Best Local Similarity 83.3%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
  
QY 2786 AAAAAAAAAAAAAA 2803  
Db 18 AAAGAAAAAAAAAGAAAGA 1  
  
RESULT 5224  
AAX15196  
ID AAX15196 standard; DNA; 18 BP.  
XX  
AC AAX15196;  
XX  
XX 25-MAR-2003 (revised)  
DT 28-APR-1999 (first entry)  
XX  
XX Triple helix forming oligonucleotide.  
DE  
XX Double-stranded DNA; triple helix; quinoline;  
KW quinazoline-based structure; hydrogen bonding; ss.  
XX  
XX Synthetic.  
XX  
XX WO9623777-A1.  
XX  
XX 08-AUG-1996.  
XX  
XX 29-JAN-1996; 96WO-US001473.  
XX  
XX 01-FEB-1995; 95US-00384324.  
XX  
XX (UYNE-) UNIV NEBRASKA.  
XX  
XX Gold BI;  
XX  
XX WPI; 1996-371338/37.  
XX  
XX New substd. quinoline and quinazoline cpds. - are monomers for triple  
PT helix-forming oligo:nucleotide analogues useful e.g. for treating tumours  
PT or viral infection.  
XX  
XX Disclosure; Fig 1; 102pp; English.  
PS  
XX  
XX The present sequence represents a triple helix forming oligonucleotide  
CC that form a triple helix with the double-stranded DNA sequence described  
CC in AAX15195. The specification describes novel monomeric compositions  
CC which are substituted quinoline or quinazoline-based structures capable  
CC of hydrogen bonding specifically with interstrand purine-pyrimidine pairs  
CC in a double stranded Watson-Crick DNA molecule to form a triple-helix.  
CC (Updated on 25-MAR-2003 to correct PF field.)  
XX  
SQ Sequence 18 BP; 0 A; 3 C; 0 G; 15 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.2; DB 1; Length 18;  
Best Local Similarity 83.3%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
  
QY 2166 TTTTTTTTTTTTTTTT 2183  
Db 1 TTTTCTTTTCTTTTCT 18  
  
RESULT 5225  
ABS52682

ID ABS52682 standard; DNA; 18 BP.  
XX AC ABS52682;  
XX DT 15-NOV-2002 (first entry)  
XX DE mRNA display splint oligonucleotide.  
XX KW Translation; ss; splint; cell-free translation system; insulin;  
KW growth hormone; erythropoietin; ribosome display; mRNA display.  
XX OS Synthetic.  
XX PN WO200259293-A2.  
XX PD 01-AUG-2002.  
XX PF 25-JAN-2002; 2002WO-US002344.  
XX PR 25-JAN-2001; 2001US-0264147P.  
XX PA (FORS/) FORSTER A C.  
XX PA (BLAC/) BLACKLOW S C.  
XX PI Forster AC, Blacklow SC;  
XX DR WPI; 2002-608454/65.  
XX PT A new reconstituted cell-free translation system comprising translation  
PT factors and tRNA species capable of translating exogenously added mRNAs,  
PT useful for the synthesis of peptides or protein ligands or catalysts,  
PT e.g. insulin.  
XX PS Disclosure; Page 15; 83pp; English.  
XX CC This invention relates to a novel reconstituted cell-free translation  
CC system comprising translation factors and transfer ribonucleic acid  
CC (tRNA) species which translate exogenously added messenger RNA (mRNA)  
CC with highly selective incorporation at each codon to form a peptide or a  
CC peptidomimetic product when the system includes one or more tRNA species  
CC charged with a synthetic amino acid or amino acid analogue. The  
CC translation system of the invention is useful for the synthesis of  
CC peptide or protein ligands or catalysts, such as insulin, growth hormone  
CC or erythropoietin, and for pure ribosome display and pure mRNA display  
CC selection experiments. The translation process provides a simplified,  
CC highly purified system that offers potentially improved routes to all  
CC peptides and proteins currently synthesised by alternative routes. This  
CC overcomes the limitations of the prior art, e.g. difficulty in  
CC maintaining purified components and trace contaminants or inefficient  
CC processivity. There are several advantages associated with performing  
CC peptide and protein display in a pure system, such as an expected lack of  
CC post-translational modification of peptides, lack of proteases which  
CC often cause protein degradation problem and a lack of competition from  
CC contaminants in the selection steps. The present sequence represents a  
CC splint oligonucleotide used in the mRNA display method used in the  
XX invention  
SQ Sequence 18 BP; 4 A; 2 C; 0 G; 12 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.2; DB 1; Length 18;  
Best Local Similarity 83.3%; Pred. No. 4.3e+03;  
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
Qy 2172 TTTT TTTT TTTT TTTT TTTT AAC 2189  
Db 1 TTTT TTTT TTTT TTTT TTTT AAC 18  
RESULT 5226  
ABK98126  
ID ABK98126 standard; DNA; 18 BP.  
XX ABK98126;  
XX AC

XX 07-OCT-2002 (first entry)  
XX DT Triple helix forming associated oligonucleotide #15.  
XX DE Triple helix formation; purine-rich target sequence; double-helix DNA;  
XX KW gene expression; regulatory sequence; pathogenic double-stranded DNA;  
XX KW pathogenic bacteria; virus; replication; virulence; cancer;  
XX KW oncogene suppression; cancerous cell; cytostatic; antimicrobial; ss.  
XX OS Synthetic.  
XX PN US6403302-B1.  
XX PD 11-JUN-2002.  
XX PF 16-DEC-1993; 93US-00168920.  
XX PR 17-SEP-1992; 92US-00946976.  
XX PA (CALY ) CALIFORNIA INST OF TECHNOLOGY.  
XX PI Dervan PB, Beal PA;  
XX DR WPI; 2002-536030/57.  
XX PT A triple-helix comprising a double helical nucleic acid (DHNA) and an  
PT oligonucleotide which binds in parallel and antiparallel orientation,  
PT respectively, for targetting sequences on alternate strands of DHNA to  
PT control gene expression.  
XX PS Example 7; Col 41; 108pp; English.  
XX CC The present invention relates to methods and oligonucleotides for forming  
CC a triple-helix comprising a double helical nucleic acid comprising first  
CC and second substantially complementary strands, and an oligonucleotide  
CC bound to a purine-rich target sequence within the double helical nucleic  
CC acid, where the oligonucleotide binds in a parallel and antiparallel  
CC orientation, respectively, to target sequences on alternate strands of  
CC the double helical nucleic acid. The method has therapeutic applications,  
CC where gene expression is controlled by selective triple-helix formation  
CC within expression regulatory sequences of a target gene. The  
CC oligonucleotides can be used to form triple-helices, and are useful to  
CC detect the presence or absence of specific sequences within genomic DNA  
CC for diagnostic and therapeutic purposes. The oligonucleotides can be  
CC selected to specifically bind to pathogenic double-stranded DNA including  
CC specific sequences required by pathogenic bacteria or viruses for  
CC replication or virulence, reducing their pathogenicity. Alternatively,  
CC the oligonucleotide can be chosen to target a unique sequence of the  
CC pathogen which is not found in the genome of pathogen's host. The  
CC oligonucleotides can be used in cancer treatment by way of triple-helix  
CC suppression of specific oncogenes including those of endogenous or viral  
CC origin. Such therapeutic oligonucleotides are capable of forming triple-  
CC helices with such sequences in cancerous cells containing the activated  
CC oncogene, so preferentially killing or repressing the cancer causing  
CC cell. The present sequence represents an oligonucleotide used in the  
CC methods of the present invention  
XX SQ Sequence 18 BP; 0 A; 2 C; 0 G; 14 T; 0 U; 2 Other;  
Query Match 0.5%; Score 13.2; DB 1; Length 18;  
Best Local Similarity 77.8%; Pred. No. 4.3e+03;  
Matches 14; Conservative 2; Mismatches 2; Indels 0; Gaps 0;  
Qy 2166 TTTT TTTT TTTT TTTT TTTT TTT 2183  
Db 1 TTTT TTTT TTTT TTTT TTTT TTT 18  
RESULT 5227  
AAQ20030/c  
ID AAQ20030 standard; DNA; 19 BP.  
XX

AC AAQ20030;  
XX  
DT 01-APR-1992 (first entry)  
XX  
DE Cross-linking oligomer 116 for targetting HUMILB.  
XX  
KW deoxyribonucleic acid; major groove; ethanocamino group; IL-1;  
KW aziridinylcytosine; cross-linking group; o-xyloso linking group;  
KW human interleukin-1 beta; inverted polarity region; ss.  
XX  
OS Synthetic.  
XX  
FH Key  
FT modified\_base 1 Location/Qualifiers  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "N4N4-ethanocytosine"  
FT modified\_base 4  
FT /\*tag= b  
FT /mod\_base= OTHER  
FT /note= "N-methyl-8-oxo-2'-deoxyadenine"  
FT misc\_feature 14 .19  
FT /\*tag= c  
FT /label= inverted\_polarity\_region  
FT /note= "see comments"  
FT modified\_base 14  
FT /\*tag= d  
FT /mod\_base= OTHER  
FT /note= "N-methyl-8-oxo-2'-deoxyadenine"  
FT modified\_base 18  
FT /\*tag= e  
FT /mod\_base= OTHER  
FT /note= "N-methyl-8-oxo-2'-deoxyadenine"  
FT modified\_base 19  
FT /\*tag= f  
FT /mod\_base= OTHER  
FT /note= "N-methyl-8-oxo-2'-deoxyadenine"  
XX  
PN WO9118997-A.  
XX  
PD 12-DEC-1991.  
XX  
PF 25-MAY-1990; 90US-00529346.  
XX  
PR 25-MAY-1990; 90US-00529346.  
PR 14-JAN-1991; 91US-00640654.  
XX  
PA (GILE-) GILEAD SCIE INC.  
XX  
PI Matteucci MD, Krawczyk S;  
XX  
DR WPI; 1992-007480/01.  
XX  
PT New sequence-specific non-photo-activated crosslinking agents - bind to  
PT the major groove of duplex DNA and are esp. useful for treating latent  
PT infections e.g. HIV.  
XX  
PS Example 4; Page 25; 42pp; English.  
XX  
CC This oligomer contains an inverted polarity region formed from an o-  
CC xyloso dimer synthon. Residues 13 and 14 are linked via an o-xyloso group  
CC (i.e. nucleotides that have xylose sugar linked via the o-xylene ring).  
CC The sequence is designed to target the Human interleukin-1 beta gene  
CC beginning at nucleotide 7378 and will covalently cross-link to it via the  
CC N4N4-ethanocytosine group. See also AAQ20026-Q20029  
XX  
SQ Sequence 19 BP; 4 A; 1 C; 0 G; 14 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.2; DB 1; Length 19;  
Best Local Similarity 83.3%; Pred. No. 4.7e+03;  
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 2783 TTGAAAAA 2800

Db 19 TTAATAAAAAAATAA 2  
RESULT 5228  
AAQ30373/C  
ID AAQ30373 standard; DNA; 19 BP.  
XX  
AC AAQ30373;  
XX  
DT 25-MAR-2003 (revised)  
DT 07-DEC-1992 (first entry)  
XX  
DE Oligomer HUM beta 113 for forming triplex with IL-1 target duplex.  
XX  
KW Human interleukin - 1 beta gene; herpes simplex; AIDS; modified; HIV;  
KW RSV; HPV; malignancy; hepatitis; inflammation; ss.  
XX  
OS Synthetic.  
XX  
FH Key  
FT modified\_base 1 Location/Qualifiers  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "OTHER= N6 methyl-8-oxo 2' deoxyadenine"  
FT modified\_base 4  
FT /\*tag= b  
FT /mod\_base= OTHER  
FT /note= "OTHER= N6 methyl-8-oxo 2' deoxyadenine"  
FT misc\_feature 13 .14  
FT /\*tag= g  
FT /note= "O-xyloso dimer synthon linkage"  
FT misc\_feature 14 .19  
FT /\*tag= f  
FT /label= inverted\_polarity\_region  
FT /note= "see comments"  
FT modified\_base 14  
FT /\*tag= c  
FT /mod\_base= OTHER  
FT /note= "OTHER= N6 methyl-8-oxo 2' deoxyadenine"  
FT modified\_base 18  
FT /\*tag= d  
FT /mod\_base= OTHER  
FT /note= "OTHER= N6 methyl-8-oxo 2' deoxyadenine"  
FT modified\_base 19  
FT /\*tag= e  
FT /mod\_base= OTHER  
FT /note= "OTHER= N6 methyl-8-oxo 2' deoxyadenine"  
XX  
PN WO9209705-A1.  
XX  
PD 11-JUN-1992.  
XX  
PF 25-NOV-1991; 91WO-US008811.  
XX  
PR 23-NOV-1990; 90US-00617907.  
PR 18-JAN-1991; 91US-00643382.  
PR 08-APR-1991; 91US-00683420.  
PR 17-APR-1991; 91US-00686544.  
PR 17-APR-1991; 91US-00686546.  
PR 17-APR-1991; 91US-00686547.  
PR 27-SEP-1991; 91US-00766733.  
XX  
PA (GILE-) GILEAD SCI INC.  
XX  
PI Froehler B, Krawczyk S, Matteucci MD, Milligan J;  
XX  
DR WPI; 1992-217083/26.  
XX  
PT New oligomers contg. modified bases - which form a triplex with G-C  
PT doublet in a DNA duplex, for treating and diagnosing HIV, hepatitis,  
PT herpes malignancy and inflammation.  
XX

PS Claim 12; Page 70; 77pp; English.

XX The synthetic oligomer is capable of forming a triplex at physiological pH with a purine rich target sequence by coupling into the major groove of the duplex. The specific target sequence of this oligomer is the human interleukin -1 beta gene beginning at nucleotide 7378 contg. a purine rich sequence concd. on one strand of the duplex. The oligomer, and others like it are useful in diagnosis and therapy of diseases characterised by specific DNA duplex targets, e.g. HPV; HER; HIV, hepatitis B, herpes, malignant tumours and inflammation. The triple helices form under mild conditions thus assays may be carried out without subjecting the test specimen to harsh conditions. The oligomer contains an inverted polarity region formed from an o-xyloso dimer synthon. The linking gp. is o-xyloso (nucleotides have the 3' positions of xylose sugars linked via the o-xylene ring). Two nucleotides are coupled through a xylene residue to form the dimer synthon. This additional modifications may render the oligomer stable to nuclease activity. The oligomer is able to inhibit gene expression, as verified by in vitro systems. See also AAQ25452-25501 and AAQ30226-448. (Updated on 25-MAR-2003 to correct PN field.)

XX Sequence 19 BP; 5 A; 0 C; 0 G; 14 T; 0 U; 0 Other;

SQ Query Match 0.5%; Score 13.2; DB 1; Length 19;  
Best Local Similarity 83.3%; Pred. No. 4.7e+03;  
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2783 TTGAAAAAATAAATAA 2800  
Db 19 TTAATAATAAATAAATAA 2

RESULT 5229  
AAQ30376/c

ID AAQ30376 standard; DNA; 19 BP.

XX AAQ30376;

XX 25-MAR-2003 (revised)

DT 07-DEC-1992 (first entry)

XX Oligomer HUM beta 116 for forming triplex with IL-1 target duplex.

XX Human interleukin - 1 beta gene; herpes simplex; AIDS; modified; HIV;

KW RSV; HPV; malignancy; hepatitis; inflammation; ss.

XX Synthetic.

OS Key Location/Qualifiers

FT modified\_base 1 /\*tag= a

FT /mod\_base= OTHER

FT /note= "OTHER= N4 N4 ethanocytosine"

FT modified\_base 4 /\*tag= b

FT /mod\_base= OTHER

FT /note= "OTHER= N6 methyl-8-oxo 2' deoxyadenine"

FT misc\_feature 13. .14

FT /\*tag= g

FT /note= "o-xyloso dimer synthon linkage"

FT misc\_feature 14. .19

FT /\*tag= f

FT /label= inverted\_polarity\_region

FT /note= "see comments"

FT modified\_base 14

FT /\*tag= c

FT /mod\_base= OTHER

FT /note= "OTHER= N6 methyl-8-oxo 2' deoxyadenine"

FT modified\_base 18

FT /\*tag= d

FT /mod\_base= OTHER

FT /note= "OTHER= N6 methyl-8-oxo 2' deoxyadenine"

FT modified\_base 19

FT /\*tag= e

FT /mod\_base= OTHER

FT /note= "OTHER= N6 methyl-8-oxo 2' deoxyadenine"

XX WO9209705-A1.

XX 11-JUN-1992.

PD 25-NOV-1991; 91WO-US008811.

XX 23-NOV-1990; 90US-00617907.

PR 18-JAN-1991; 91US-00643382.

PR 08-APR-1991; 91US-00683420.

PR 17-APR-1991; 91US-00686544.

PR 17-APR-1991; 91US-00686546.

PR 17-APR-1991; 91US-00686547.

PR 27-SEP-1991; 91US-00766733.

XX (GILE-) GILEAD SCI INC.

XX Froehler B, Krawczyk S, Matteucci MD, Milligan J;

PI WPI; 1992-217083/26.

XX New oligomers contg. modified bases - which form a triplex with G-C doublet in a DNA duplex, for treating and diagnosing HIV, hepatitis, herpes malignancy and inflammation.

XX Claim 12; Page 70; 77pp; English.

XX The synthetic oligomer is capable of forming a triplex at physiological pH with a purine rich target sequence by coupling into the major groove of the duplex. The specific target sequence of this oligomer is the human interleukin -1 beta gene beginning at nucleotide 7378 contg. a purine rich sequence concd. on one strand of the duplex. The oligomer, and others like it are useful in diagnosis and therapy of diseases characterised by specific DNA duplex targets, e.g. HPV; HER; HIV, hepatitis B, herpes, malignant tumours and inflammation. The triple helices form under mild conditions thus assays may be carried out without subjecting the test specimen to harsh conditions. The oligomer contains an inverted polarity region formed from an o-xyloso dimer synthon. The linking gp. is o-xyloso (nucleotides have the 3' positions of xylose sugars linked via the o-xylene ring). Two nucleotides are coupled through a xylene residue to form the dimer synthon. This additional modifications may render the oligomer stable to nuclease activity. The oligomer is able to inhibit gene expression, as verified by in vitro systems. See also AAQ25452-25501 and AAQ30226-448. (Updated on 25-MAR-2003 to correct PN field.)

XX Sequence 19 BP; 4 A; 1 C; 0 G; 14 T; 0 U; 0 Other;

SQ Query Match 0.5%; Score 13.2; DB 1; Length 19;  
Best Local Similarity 83.3%; Pred. No. 4.7e+03;  
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2783 TTGAAAAAATAAATAA 2800  
Db 19 TTAATAATAAATAAATAA 2

RESULT 5230  
ABA97625

ID ABA97625 standard; DNA; 19 BP.

XX ABA97625;

XX 11-APR-2002 (first entry)

DT Probe d.

XX ss; fluorochrome; nucleic acid probe; fluorescence.

XX Unidentified.



XX JP2001286300-A.  
PN  
XX  
PD 16-OCT-2001.  
XX  
PF 20-APR-2000; 2000JP-00120097.  
XX  
PR 20-APR-1999; 99JP-00111601.  
PR 24-AUG-1999; 99JP-00236666.  
PR 30-AUG-1999; 99JP-00242693.  
PR 01-FEB-2000; 2000JP-00028896.  
XX  
XX (BIOI-) BIOINDUSTRY KYOKAI SH.  
PA (KANK-) KANKYO ENG KK.  
PA (KEIZ-) KEIZAI SANGYOSHO SANGYO GIJUTSU SOGO KEN.  
XX  
XX WPI; 2002-134193/18.  
XX  
XX Measurement of nucleic acids, using a nucleic acid probe and analysis of  
PT the obtained data.  
XX  
PS Example 5; Page 17; 34pp; Japanese.  
XX  
XX This invention relates to a method for measuring nucleic acids using a  
CC nucleic acid probe labelled with a fluorochrome. The nucleic acid probe  
CC decreases the fluorescence of the fluorochrome when hybridised with a  
CC target nucleic acid, the decrease in the fluorescence is measured. The  
CC method can be used for measuring a target nucleic acid  
XX  
SQ Sequence 19 BP; 15 A; 0 C; 0 G; 4 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.2; DB 1; Length 19;  
Best Local Similarity 83.3%; Pred. No. 4.7e+03;  
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 2782 ATTGAAAAA 2799  
DB 2 ATATATA 19  
RESULT 5231  
ADE27307/c  
ID ADE27307 standard; RNA; 19 BP.  
XX  
AC ADE27307;  
XX  
DT 29-JAN-2004 (first entry)  
XX  
DE Stearoyl-CoA desaturase siNA oligonucleotide SEQ ID NO:251.  
XX  
KW short interfering nucleic acid; siNA; downregulation; inhibition; SCD;  
KW stearoyl-CoA desaturase; RNA interference; anorectic; antidiabetic;  
KW antiarteriosclerotic; cytotstatic; virucide; obesity; diabetes;  
KW atherosclerosis; cancer; viral infection; drug screening;  
KW genetic engineering; pharmacogenomic; gene mapping; ss.  
XX  
OS Synthetic.  
XX  
XX WO2003070885-A2.  
PN  
XX  
PD 28-AUG-2003.  
XX  
PF 13-FEB-2003; 2003WO-US004317.  
XX  
PR 20-FEB-2002; 2002US-0358580P.  
PR 11-MAR-2002; 2002US-0363124P.  
PR 06-JUN-2002; 2002US-0386782P.  
PR 29-AUG-2002; 2002US-0406784P.  
PR 05-SEP-2002; 2002US-0408378P.  
PR 09-SEP-2002; 2002US-0409293P.  
PR 20-SEP-2002; 2002US-0412304P.  
PR 15-JAN-2003; 2003US-0440129P.  
XX

(RIBO-) RIBOZYME PHARM INC.  
XX  
PI Mcswiggen J, Beigelman L, Thompson J;  
XX  
DR WPI; 2003-721687/68.  
XX  
PT New short interfering nucleic acid, useful e.g. for treatment and  
PT diagnosis of obesity or diabetes, downregulates expression of the  
PT stearoyl-CoA desaturase gene.  
XX  
PS Example 3; SEQ ID NO 251; 139pp; English.  
XX  
CC The present invention describes a short interfering nucleic acid (siNA)  
CC that downregulates expression of the SCD (stearoyl-CoA desaturase) gene  
CC by RNA interference. Also described: (1) modulating expression of SCD  
CC genes in cells, tissue explants or organisms by introduction of siNA; (2)  
CC kits for in vitro or in vivo delivery of siNA; (3) conjugates and/or  
CC complexes of siNA; and (4) vectors that express siNA. SCD inhibiting  
CC siNAs have anorectic, antidiabetic, antiarteriosclerotic, cytotstatic and  
CC virucide activities. The siNAs can be used to modulate expression of SCD  
CC genes, in cells, tissue explants or organisms, e.g. for treating obesity;  
CC diabetes (types I and II); atherosclerosis; cancer and viral infections.  
CC They can also be used for drug screening; diagnosis; target  
CC identification and validation; genetic engineering; pharmacogenomics;  
CC studying gene function and gene mapping (e.g. of single-nucleotide  
CC polymorphisms). The present sequence represents an SCD siNA, which is  
CC used in the exemplification of the present invention.  
XX  
SQ Sequence 19 BP; 1 A; 0 C; 3 G; 0 T; 15 U; 0 Other;  
Query Match 0.5%; Score 13.2; DB 1; Length 19;  
Best Local Similarity 83.3%; Pred. No. 4.7e+03;  
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 2781 AATTGAAAAA 2798  
DB 18 AACCCAAAAA 1  
RESULT 5232  
ADE27597  
ID ADE27597 standard; RNA; 19 BP.  
XX  
AC ADE27597;  
XX  
DT 29-JAN-2004 (first entry)  
XX  
DE Stearoyl-CoA desaturase siNA oligonucleotide SEQ ID NO:541.  
XX  
KW short interfering nucleic acid; siNA; downregulation; inhibition; SCD;  
KW stearoyl-CoA desaturase; RNA interference; anorectic; antidiabetic;  
KW antiarteriosclerotic; cytotstatic; virucide; obesity; diabetes;  
KW atherosclerosis; cancer; viral infection; drug screening;  
KW genetic engineering; pharmacogenomic; gene mapping; ss.  
XX  
OS Synthetic.  
XX  
XX WO2003070885-A2.  
PN  
XX  
PD 28-AUG-2003.  
XX  
PF 13-FEB-2003; 2003WO-US004317.  
XX  
PR 20-FEB-2002; 2002US-0358580P.  
PR 11-MAR-2002; 2002US-0363124P.  
PR 06-JUN-2002; 2002US-0386782P.  
PR 29-AUG-2002; 2002US-0406784P.  
PR 05-SEP-2002; 2002US-0408378P.  
PR 09-SEP-2002; 2002US-0409293P.  
PR 20-SEP-2002; 2002US-0412304P.  
PR 15-JAN-2003; 2003US-0440129P.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.

XX Mcswiggen J, Beigelman L, Thompson J;  
PI WPI; 2003-721687/68.  
XX  
XX  
PT New short interfering nucleic acid, useful e.g. for treatment and  
PT diagnosis of obesity or diabetes, downregulates expression of the  
PT stearyl-CoA desaturase gene.  
XX  
XX  
PS Example 3; SEQ ID NO 541; 139pp; English.  
XX  
CC The present invention describes a short interfering nucleic acid (siNA)  
CC that downregulates expression of the SCD (stearyl-CoA desaturase) gene  
CC by RNA interference. Also described: (1) modulating expression of SCD  
CC genes in cells, tissue explants or organisms by introduction of siNA; (2)  
CC kits for in.vitro or in vivo delivery of siNA; (3) conjugates and/or  
CC complexes of siNA; and (4) vectors that express siNA. SCD inhibiting  
CC siNAs have anorectic, antidiabetic, antiarteriosclerotic, cytostatic and  
CC virucide activities. The siNAs can be used to modulate expression of SCD  
CC genes, in cells, tissue explants or organisms, e.g. for treating obesity;  
CC diabetes (types I and II); atherosclerosis; cancer and viral infections.  
CC They can also be used for drug screening; diagnosis; target  
CC identification and validation; genetic engineering; pharmacogenomics;  
CC studying gene function and gene mapping (e.g. of single-nucleotide  
CC polymorphisms). The present sequence represents an SCD siNA, which is  
CC used in the exemplification of the present invention.  
XX  
SQ Sequence 19 BP; 15 A; 3 C; 0 G; 0 T; 1 U; 0 Other;  
  
Query Match 0.5%; Score 13.2; DB 1; Length 19;  
Best Local Similarity 83.3%; Pred. No. 4.7e+03;  
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
  
QY 2781 AATTGAAAAA 2798  
Db |||||  
2 AACCCAAAAA 19  
  
RESULT 5233  
AAQ20028/c  
ID AAQ20028 standard; DNA; 19 BP.  
XX  
AC AAQ20028;  
XX  
DT 01-APR-1992 (first entry)  
XX  
DE Cross-linking oligomer 114 for targetting HUMIL1B.  
XX  
KW deoxyribonucleic acid; major groove; ethanoamino group; IL-1;  
KW aziridinylcytosine; cross-linking group; o-xyloso linking group;  
KW human interleukin-1 beta; inverted polarity region; ss.  
XX  
OS Synthetic.  
XX  
FH Key Location/Qualifiers  
FT modified\_base 1 /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "N-methyl-8-oxo-2'-deoxyadenine"  
FT modified\_base 4 /\*tag= b  
FT /mod\_base= OTHER  
FT /note= "N-methyl-8-oxo-2'-deoxyadenine"  
FT misc\_feature 14. .19  
FT /\*tag= c  
FT /label= inverted\_polarity\_region  
FT /note= "see comments"  
FT modified\_base 14 /\*tag= d  
FT /mod\_base= OTHER  
FT /note= "N-methyl-8-oxo-2'-deoxyadenine"  
FT modified\_base 18 /\*tag= e

FT /mod\_base= OTHER  
FT /note= "N-methyl-8-oxo-2'-deoxyadenine"  
FT 19  
FT /\*tag= f  
FT /mod\_base= OTHER  
FT /note= "N4N4-ethanocytosine"  
XX  
PN W09118997-A.  
XX  
PD 12-DEC-1991.  
XX  
PF 25-MAY-1990; 90US-00529346.  
XX  
PR 25-MAY-1990; 90US-00529346.  
PR 14-JAN-1991; 91US-00640654.  
XX  
PA (GILE-) GILEAD SCIE INC.  
XX  
PI Matteucci MD, Krawczyk S;  
XX  
DR WPI; 1992-007480/01.  
XX  
PT New sequence-specific non-photo-activated crosslinking agents - bind to  
PT the major groove of duplex DNA and are esp. useful for treating latent  
PT infections e.g. HIV.  
XX  
PS Example 4; Page 25; 42pp; English.  
XX  
CC This oligomer contains an inverted polarity region formed from an o-  
CC xyloso dimer synthon. Residues 13 and 14 are linked via an o-xyloso group  
CC (i.e. nucleotides that have xylose sugar linked via the o-xyloso ring).  
CC The sequence is designed to target the Human interleukin-1 beta gene  
CC beginning at nucleotide 7378 and will covalently cross-link to it via the  
CC N4N4-ethanocytosine group. See also AAQ20026-Q20030  
XX  
SQ Sequence 19 BP; 4 A; 1 C; 0 G; 14 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.2; DB 1; Length 19;  
Best Local Similarity 83.3%; Pred. No. 4.7e+03;  
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
  
QY 2785 GAAAAA 2802  
Db |||||  
19 GTAAATAA 2  
  
RESULT 5234  
AAQ20029/c  
ID AAQ20029 standard; DNA; 19 BP.  
XX  
AC AAQ20029;  
XX  
DT 01-APR-1992 (first entry)  
XX  
DE Cross-linking oligomer 115 for targetting HUMIL1B.  
XX  
KW deoxyribonucleic acid; major groove; ethanoamino group; IL-1;  
KW aziridinylcytosine; cross-linking group; o-xyloso linking group;  
KW human interleukin-1 beta; inverted polarity region; ss.  
XX  
OS Synthetic.  
XX  
FH Key Location/Qualifiers  
FT modified\_base 1 /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "N4N4-ethanocytosine"  
FT modified\_base 4 /\*tag= b  
FT /mod\_base= OTHER  
FT /note= "N-methyl-8-oxo-2'-deoxyadenine"  
FT misc\_feature 14. .19  
FT /\*tag= c

FT /label= inverted\_polarity\_region  
FT /note= "see comments"  
FT 14  
FT /\*tag= d  
FT /mod\_base= OTHER  
FT /note= "N-methyl-8-oxo-2'-deoxyadenine"  
FT 18  
FT /\*tag= e  
FT /mod\_base= OTHER  
FT /note= "N-methyl-8-oxo-2'-deoxyadenine"  
FT 19  
FT /\*tag= f  
FT /mod\_base= OTHER  
FT /note= "N4N4-ethanocytosine"  
XX  
PN W09118997-A.  
XX  
XX 12-DEC-1991.  
PD  
XX  
PF 25-MAY-1990; 90US-00529346.  
XX  
XX 25-MAY-1990; 90US-00529346.  
PR 14-JAN-1991; 91US-00640654.  
XX  
PA (GILE-) GILEAD SCIE INC.  
XX  
XX Matteucci MD, Krawczyk S;  
PI  
XX WPI; 1992-007480/01.  
DR  
XX  
XX New sequence-specific non-photo-activated crosslinking agents - bind to  
PT the major groove of duplex DNA and are esp. useful for treating latent  
PT infections e.g. HIV.  
XX  
XX Example 4; Page 25; 42pp; English.  
PS  
XX This oligomer contains an inverted polarity region formed from an o-  
CC xyloso dimer synthon. Residues 13 and 14 are linked via an o-xyloso group  
CC (i.e. nucleotides that have xylose sugar linked via the o-xylene ring).  
CC The sequence is designed to target the Human interleukin-1 beta gene  
CC beginning at nucleotide 7378 and will covalently cross-link to it via the  
CC N4N4-ethanocytosine groups. See also AAQ20026-Q20030  
XX  
SQ Sequence 19 BP; 3 A; 2 C; 0 G; 14 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.2; DB 1; Length 19;  
Best Local Similarity 83.3%; Pred. No. 4.7e+03;  
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
  
QY 2785 GAAAAAATAAAAAAAAAA 2802  
Db 19 GTAAATAAAAAAAAAATAA 2  
  
RESULT 5235  
AAQ30375/C  
ID AAQ30375 standard; DNA; 19 BP.  
XX  
AC AAQ30375;  
XX  
DT 25-MAR-2003 (revised)  
DT 07-DEC-1992 (first entry)  
XX  
DE Oligomer HUM beta 115 for forming triplex with IL-1 target duplex.  
XX Human interleukin - 1 beta gene; herpes simplex; AIDS; modified; HIV;  
KW RSV; HPV; malignancy; hepatitis; inflammation; ss.  
XX  
OS Synthetic.  
XX  
XX Key Location/Qualifiers  
FH modified\_base 1  
FT /\*tag= a

FT /mod\_base= OTHER  
FT /note= "OTHER= N4 N4 ethanocytosine"  
FT 4  
FT /\*tag= b  
FT /mod\_base= m5c  
FT 13..14.  
FT /\*tag= g  
FT /note= "O-xyloso dimer synthon linkage"  
FT 14..20  
FT /\*tag= f  
FT /label= inverted\_polarity\_region  
FT /note= "see comments"  
FT 14  
FT /\*tag= c  
FT /mod\_base= m5c  
FT 18  
FT /\*tag= d  
FT /mod\_base= m5c  
FT 19  
FT /\*tag= e  
FT /mod\_base= OTHER  
FT /note= "OTHER= N4 N4 ethanocytosine"  
XX  
PN W09209705-A1.  
XX  
PD 11-JUN-1992.  
XX  
XX 25-NOV-1991; 91WO-US008811.  
PF  
XX 23-NOV-1990; 90US-00617907.  
PR 18-JAN-1991; 91US-00643382.  
PR 08-APR-1991; 91US-00683420.  
PR 17-APR-1991; 91US-00686544.  
PR 17-APR-1991; 91US-00686546.  
PR 17-APR-1991; 91US-00686547.  
PR 27-SEP-1991; 91US-00766733.  
XX  
PA (GILE-) GILEAD SCI INC.  
XX  
XX Froehler B, Krawczyk S, Matteucci MD, Milligan J;  
PI WPI; 1992-217083/26.  
XX  
PT New oligomers contg. modified bases - which form a triplex with G-C  
PT doublet in a DNA duplex, for treating and diagnosing HIV, hepatitis,  
PT herpes malignancy and inflammation.  
XX  
PS Claim 12; Page 70; 77pp; English.  
XX  
CC The synthetic oligomer is capable of forming a triplex at physiological  
CC pH with a purine rich target sequence by coupling into the major groove  
CC of the duplex. The specific target sequence of this oligomer is the human  
CC interleukin -1 beta gene beginning at nucleotide 7378 contg. a purine  
CC rich sequence concd. on one strand of the duplex. The oligomer, and  
CC others like it are useful in diagnosis and therapy of diseases  
CC characterised by specific DNA duplex targets, e.g. HPV; HER; HIV,  
CC hepatitis B, herpes, malignant tumours and inflammation. The triple  
CC helices form under mild conditions thus assays may be carried out without  
CC subjecting the test specimen to harsh conditions. The oligomer contains  
CC an inverted polarity region formed from an o-xyloso dimer synthon. The  
CC linking gp. is o-xyloso (nucleotides have the 3' positions of xylose  
CC sugars linked via the o-xylene ring). Two nucleotides are coupled through  
CC a xylene residue to form the dimer synthon. This additional modifications  
CC may render the oligomer stable to nuclease activity. The oligomer is able  
CC to inhibit gene expression, as verified by in vitro systems. See also  
CC AAQ25452-25501 and AAQ30226-448. (Updated on 25-MAR-2003 to correct PN  
CC field.)  
XX  
SQ Sequence 19 BP; 3 A; 2 C; 0 G; 14 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.2; DB 1; Length 19;  
Best Local Similarity 83.3%; Pred. No. 4.7e+03;  
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2785 GAAAAAAAAAAAAAAAAA 2802  
Db 19 GTAAATAAAAAAAAAAATAA 2

RESULT 5236  
AAQ30374/c

ID AAQ30374 standard; DNA; 19 BP.  
XX  
AC AAQ30374;  
XX  
DT 25-MAR-2003 (revised)  
DT 07-DEC-1992 (first entry)  
XX  
DE Oligomer HUM beta 114 for forming triplex with IL-1 target duplex.  
XX  
KW Human interleukin - 1 beta gene; herpes simplex; AIDS; modified; HIV;  
KW RSV; HPV; malignancy; hepatitis; inflammation; ss.  
XX  
OS Synthetic.

Key Location/Qualifiers  
modified\_base 1 /tag= a  
/mod\_base= OTHER  
/note= "OTHER= N6 methyl-8-oxo 2' deoxyadenine"  
modified\_base 4 /tag= b  
/mod\_base= m5c  
misc\_feature 13.14  
misc\_feature 14.20  
/tag= g  
/note= "O-xyloso dimer synthon linkage"  
/tag= f  
/label= inverted\_polarity\_region  
/note= "see comments"  
modified\_base 14 /tag= c  
/mod\_base= m5c  
modified\_base 18 /tag= d  
/mod\_base= m5c  
modified\_base 19 /tag= e  
/mod\_base= OTHER  
/note= "OTHER= N4 N4 ethanocytosine"

WO9209705-A1.  
11-JUN-1992.  
25-NOV-1991; 91WO-US008811.  
23-NOV-1990; 90US-00617907.  
18-JAN-1991; 91US-00643382.  
08-APR-1991; 91US-00683420.  
17-APR-1991; 91US-00686544.  
17-APR-1991; 91US-00686546.  
17-APR-1991; 91US-00686547.  
27-SEP-1991; 91US-00766733.  
XX  
PA (GILE-) GILEAD SCI INC.  
XX  
PI Froehler B, Krawczyk S, Matteucci MD, Milligan J;  
XX WPI; 1992-217083/26.  
XX  
XX New oligomers contg. modified bases - which form a triplex with G-C  
PT doublet in a DNA duplex, for treating and diagnosing HIV, hepatitis,  
PT herpes malignancy and inflammation.  
XX  
PS Claim 12; Page 70; 77pp; English.

XX The synthetic oligomer is capable of forming a triplex at physiological  
CC pH with a purine rich target sequence by coupling into the major groove  
CC of the duplex. The specific target sequence of this oligomer is the human  
CC interleukin -1 beta gene beginning at nucleotide 7378 contg. a purine  
CC rich sequence concd. on one strand of the duplex. The oligomer, and  
CC others like it are useful in diagnosis and therapy of diseases  
CC characterised by specific DNA duplex targets, e.g. HPV; HER; HIV,  
CC hepatitis B, herpes, malignant tumours and inflammation. The triple  
CC helices form under mild conditions thus assays may be carried out without  
CC subjecting the test specimen to harsh conditions. The oligomer contains  
CC an inverted polarity region formed from an o-xyloso dimer synthon. The  
CC linking gp. is o-xyloso (nucleotides have the 3' positions of xylose  
CC sugars linked via the o-xylene ring). Two nucleotides are coupled through  
CC a xylene residue to form the dimer synthon. This additional modifications  
CC may render the oligomer stable to nuclease activity. The oligomer is able  
CC to inhibit gene expression, as verified by in vitro systems. See also  
CC AAQ25452-25501 and AAQ30226-448. (Updated on 25-MAR-2003 to correct PN  
CC field.)  
XX  
SQ Sequence 19 BP; 4 A; 1 C; 0 G; 14 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.2; DB 1; Length 19;  
Best Local Similarity 83.3%; Pred. No. 4.7e+03;  
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2785 GAAAAAAAAAAAAAAAAA 2802  
Db 19 GTAAATAAAAAAAAAAATAA 2

RESULT 5237  
AAT49298/c

ID AAT49298 standard; RNA; 19 BP.  
XX  
AC AAT49298;  
XX  
DT 27-AUG-2003 (revised)  
DT 27-AUG-1997 (first entry)  
XX  
DE 5' end fragment of Alfalfa Mosaic Virus 4.  
XX  
KW Alfalfa Mosaic virus 4; influenza endonuclease; detection;  
KW electrophoresis; substrate cleavage; ss.  
XX  
OS Alfalfa mosaic virus.  
XX  
PN WO9640993-A1.  
XX  
PD 19-DEC-1996.  
XX  
PF 03-JUN-1996; 96WO-US008320.  
XX  
PR 07-JUN-1995; 95US-00487759.  
XX (MERI ) MERCK & CO INC.  
XX  
PI Cole JL, Kuo LC, Olsen DB;  
XX WPI; 1997-052364/05.  
XX  
PT Detection of influenza virus endonuclease in a sample - by cleavage of an  
PT RNA substrate to generate a primer for a labelled polymerase extension  
PT reaction.  
XX  
PS Claim 6; Page 12; 28pp; English.

This sequence represents the 5' end of Alfalfa Mosaic virus 4 RNA. This  
CC sequence was used as a substrate for influenza endonuclease in the method  
CC of the invention. The method allows detection of influenza endonuclease  
CC activity in a sample and comprises: (a) adding an influenza endonuclease  
CC substrate to a sample to generate an RNA product; (b) hybridising the RNA  
CC prod. with a DNA template which comprises a first segment complementary



CC to the RNA and a 5' extension of at least one nucleotide attached to the  
CC 5' end of the DNA segment, such that a DNA:RNA hybrid is formed; (c)  
CC adding a DNA polymerase and labelled mononucleotides such that the DNA  
CC polymerase incorporates the mononucleotides to the 3' end of the RNA in  
CC the RNA:DNA duplex; and (d) measuring the amount of labelled hybrid prod.  
CC as a measure of the amount of influenza endonuclease activity. The method  
CC is used to quantitate the amount of influenza endonuclease by cleaving  
CC the RNA substrate which then forms a primer for extension by a DNA  
CC polymerase on a template. The assay does not involve an electrophoresis  
CC step and thus may be run in a 96-well microtitre plate. The assay also  
CC monitors substrate cleavage at the correct position thereby  
CC discriminating against non-specific cleavage products. (Updated on 27-AUG  
CC -2003 to correct OS field.)  
XX

SQ Sequence 19 BP; 3 A; 1 C; 1 G; 0 T; 14 U; 0 Other;

Query Match 0.5%; Score 13.2; DB 1; Length 19;  
Best Local Similarity 83.3%; Pred. No. 4.7e+03;  
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2785 GAAAAAATAAAAAA 2802  
||||| ||||| |||||  
Db 19 GAAATTAATAATAAAAA 2

RESULT 5238  
AAT74905/c  
ID AAT74905 standard; RNA; 19 BP.

XX AAT74905;

XX 27-AUG-2003 (revised)  
DT 27-AUG-1997 (first entry)

XX 5' end fragment of Alfalfa Mosaic Virus 4.

XX Alfalfa Mosaic virus 4; influenza endonuclease; detection;  
KW electrophoresis; substrate cleavage; ss.

XX Alfalfa mosaic virus.

Key	Location/Qualifiers
modified_base 1	/*tag= a
modified_base 2	/mod_base= Triphosphorylated-G
modified_base 2	/*tag= b
modified_base 2	/mod_base= 2'-OMe-U

XX WO9640994-A1.

XX 19-DEC-1996.

XX 03-JUN-1996; 96WO-US008330.

XX 07-JUN-1995; 95US-00487760.

XX (MERI ) MERCK & CO INC.

XX Cole JL, Kuo LC, Olsen DB;

XX WPI; 1997-052365/05.

XX Detection of enzyme pref. endonuclease or ribozyme, in a sample - by  
PT cleavage of an RNA substrate to generate a primer for a labelled  
PT polymerase extension reaction.

XX Example; Page 14; 34pp; English.

XX This sequence represents the 5' end of Alfalfa Mosaic virus 4 RNA. This  
CC sequence was used in the method of the invention for detecting the enzyme  
CC activity in a sample. The method comprises: (a) adding an oligonucleotide  
CC substrate to a sample to generate an oligonucleotide product; (b)

CC hybridising the oligonucleotide prod. with a DNA template which comprises  
CC a first segment complementary to the oligonucleotide and a 5' extension  
CC of at least one nucleotide attached to the 5' end of the DNA segment,  
CC such that a DNA:RNA hybrid or a DNA:DNA duplex is formed; (c) adding a  
CC DNA polymerase and labelled mononucleotides such that the DNA polymerase  
CC incorporates the mononucleotides to the 3' end of the oligonucleotide;  
CC and (d) measuring the amt. of labelled hybrid prod. as a measure of the  
CC amt. of the enzyme activity in the sample. The method is used to assay  
CC for enzymes e.g. endonuclease, exonuclease or ribozymes, that act on  
CC substrates to generate single stranded oligonucleotide prods. by cleaving  
CC the substrate which then forms a primer for extension by a DNA polymerase  
CC on a template. It can be used to identify the position where the enzyme  
CC cleaves the substrate. The assay can also be used to screen for  
CC inhibitors of these enzymes. (Updated on 27-AUG-2003 to correct OS  
CC field.)  
XX

SQ Sequence 19 BP; 3 A; 1 C; 1 G; 0 T; 14 U; 0 Other;

Query Match 0.5%; Score 13.2; DB 1; Length 19;  
Best Local Similarity 83.3%; Pred. No. 4.7e+03;  
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2785 GAAAAAATAAAAAA 2802  
||||| ||||| |||||  
Db 19 GAAATTAATAATAAAAA 2

RESULT 5239

AAT47271/c

ID AAT47271 standard; RNA; 19 BP.

XX AAT47271;

XX 28-AUG-1997 (first entry)

XX Capped RNA influenza endonuclease substrate #5.

XX Capped RNA molecule; mRNA maturation; translation initiation; influenza;  
KW endonuclease aptamer; RNase; therapy; inhibitor; ss.

XX Synthetic.

Key	Location/Qualifiers
modified_base 1	/*tag= a
modified_base 2	/mod_base= triphosphorylated
modified_base 2	/*tag= b
modified_base 2	/mod_base= 2'-O-methyluridine
modified_base 6	/*tag= c
modified_base 12	/mod_base= 2'-deoxy-2'-fluoro-uridine
modified_base 12	/*tag= d
modified_base 12	/mod_base= 2'-deoxy-2'-fluoro-uridine

XX WO9640159-A1.

XX 19-DEC-1996.

XX 03-JUN-1996; 96WO-US008394.

XX 07-JUN-1995; 95US-00480068.

XX (MERI ) MERCK & CO INC.

XX Benseler F, Cole JL, Kuo LC, Olsen DB;

XX WPI; 1997-051868/05.

XX Production of capped RNA or analogues - useful as substrates for  
PT influenza virus associated virally encoded endonuclease.



CC the mRNA against various RNases present in the cell. The capped RNA or  
CC analogue is an influenza endonuclease aptamer, useful for treating or  
CC preventing an influenza infection in an animal. The synthetic capped RNA  
CC are substrates for virally encoded endonuclease associated with influenza  
CC virus. The short non-extendible (due to their length or because of the  
CC modification of the 3' end of the oligo) RNA molecules are potent  
CC inhibitors of the cleavage of capped RNA by influenza endonuclease. They  
CC may be used to investigate viral and cellular mechanisms of  
CC transcription/translation, or mRNA maturation  
XX  
SQ Sequence 19 BP; 3 A; 1 C; 1 G; 0 T; 14 U; 0 Other;

Query Match 0.5%; Score 13.2; DB 1; Length 19;  
Best Local Similarity 83.3%; Pred. No. 4.7e+03;  
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2785 GAAAAAAAAAAAAAAAAAAAAA 2802  
||||| ||||| ||||| |||||  
Db 19 GAAATTTAAATAAAAAA 2

RESULT 5243  
AAT47279/c  
ID AAT47279 standard; RNA; 19 BP.

XX AAT47279;  
AC  
XX

DT 28-AUG-1997 (first entry)

XX Capped RNA influenza endonuclease substrate #11.

KW Capped RNA molecule; mRNA maturation; translation initiation; influenza;  
KW endonuclease aptamer; RNase; therapy; inhibitor; ss.

XX Synthetic.

Key	Location/Qualifiers
modified_base 1	/tag= a
modified_base 2	/mod_base= triphosphorylated
modified_base 12	/tag= b
modified_base 13	/mod_base= 2'-O-methyluridine
modified_base 14	/tag= c
modified_base 15	/mod_base= phosphorothioated
modified_base 16	/tag= d
modified_base 17	/mod_base= phosphorothioated
modified_base 18	/tag= e
modified_base 19	/mod_base= phosphorothioated

WO9640159-A1.

19-DEC-1996.

03-JUN-1996; 96WO-US008394.

07-JUN-1995; 95US-00480068.

(MERI ) MERCK & CO INC.

Benseler F, Cole JL, Kuo LC, Olsen DB;

WPI; 1997-051868/05.

Production of capped RNA or analogues - useful as substrates for  
influenza virus associated virally encoded endonuclease.

Claim 18; Page 15; 39pp; English.

AAT47264-T47280 represent capped RNA molecules produced by the method of

CC the invention. The method of the invention is for producing capped RNA or  
CC RNA analogues. The method comprises reacting a RNA or analogue  
CC oligonucleotide with a phosphate addition agent to form a RNA or analogue  
CC mono-, di- or triphosphate, which is then capped. The presence of the cap  
CC is important for mRNA maturation, initiation of translation, and protects  
CC the mRNA against various RNases present in the cell. The capped RNA or  
CC analogue is an influenza endonuclease aptamer, useful for treating or  
CC preventing an influenza infection in an animal. The synthetic capped RNA  
CC are substrates for virally encoded endonuclease associated with influenza  
CC virus. The short non-extendible (due to their length or because of the  
CC modification of the 3' end of the oligo) RNA molecules are potent  
CC inhibitors of the cleavage of capped RNA by influenza endonuclease. They  
CC may be used to investigate viral and cellular mechanisms of  
CC transcription/translation, or mRNA maturation  
XX  
SQ Sequence 19 BP; 3 A; 1 C; 1 G; 0 T; 14 U; 0 Other;

Query Match 0.5%; Score 13.2; DB 1; Length 19;  
Best Local Similarity 83.3%; Pred. No. 4.7e+03;  
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2785 GAAAAAAAAAAAAAAAAAAAAA 2802  
||||| ||||| ||||| |||||  
Db 19 GAAATTTAAATAAAAAA 2

RESULT 5243  
AAT47277/c  
ID AAT47277 standard; RNA; 19 BP.

XX AAT47277;  
AC  
XX

DT 28-AUG-1997 (first entry)

XX Capped RNA influenza endonuclease substrate #9.

KW Capped RNA molecule; mRNA maturation; translation initiation; influenza;  
KW endonuclease aptamer; RNase; therapy; inhibitor; ss.

XX Synthetic.

Key	Location/Qualifiers
modified_base 1	/tag= a
modified_base 2	/mod_base= triphosphorylated
modified_base 3	/tag= b
modified_base 4	/mod_base= 2'-O-methyluridine
modified_base 5	/tag= c
modified_base 6	/mod_base= 2'-O-methyluridine

WO9640159-A1.

19-DEC-1996.

03-JUN-1996; 96WO-US008394.

07-JUN-1995; 95US-00480068.

(MERI ) MERCK & CO INC.

Benseler F, Cole JL, Kuo LC, Olsen DB;

WPI; 1997-051868/05.

Production of capped RNA or analogues - useful as substrates for  
influenza virus associated virally encoded endonuclease.

Claim 18; Page 15; 39pp; English.

AAT47264-T47280 represent capped RNA molecules produced by the method of  
the invention. The method of the invention is for producing capped RNA or

CC RNA analogues. The method comprises reacting a RNA or analogue  
CC oligonucleotide with a phosphate addition agent to form a RNA or analogue  
CC mono-, di- or triphosphate, which is then capped. The presence of the cap  
CC is important for mRNA maturation, initiation of translation, and protects  
CC the mRNA against various RNases present in the cell. The capped RNA or  
CC analogue is an influenza endonuclease aptamer, useful for treating or  
CC preventing an influenza infection in an animal. The synthetic capped RNA  
CC are substrates for virally encoded endonuclease associated with influenza  
CC virus. The short non-extendible (due to their length or because of the  
CC modification of the 3' end of the oligo) RNA molecules are potent  
CC inhibitors of the cleavage of capped RNA by influenza endonuclease. They  
CC may be used to investigate viral and cellular mechanisms of  
CC transcription/translation, or mRNA maturation  
XX

SQ Sequence 19 BP; 3 A; 1 C; 1 G; 0 T; 14 U; 0 Other;

Query Match 0.5%; Score 13.2; DB 1; Length 19;  
Best Local Similarity 83.3%; Pred. No. 4.7e+03;  
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2785 GAAAAAAAAAAAAAAAAA 2802  
||||| ||||| |||||  
Db 19 GAAATTAATAATAAAA 2

RESULT 5244  
AAT47273/C  
ID AAT47273 standard; RNA; 19 BP.

XX AAT47273;

XX 28-AUG-1997 (first entry)

XX Capped RNA influenza endonuclease substrate #7.

XX Capped RNA molecule; mRNA maturation; translation initiation; influenza;  
KW endonuclease aptamer; RNase; therapy; inhibitor; ss.

XX Synthetic.

XX Key Location/Qualifiers  
FH modified\_base 1  
FT /\*tag= a  
FT /mod\_base= triphosphorylated  
FT modified\_base 2  
FT /\*tag= b  
FT /mod\_base= 2'-O-methyluridine  
FT misc\_feature 19  
FT /\*tag= c  
FT /note= "biotin labelled for attachment to solid support"  
XX

PN WO9640159-A1.

XX 19-DEC-1996.

XX 03-JUN-1996; 96WO-US008394.

XX 07-JUN-1995; 95US-00480068.

XX (MERI ) MERCK & CO INC.

XX Benseler F, Cole JL, Kuo LC, Olsen DB;

XX WPI; 1997-051868/05.

XX Production of capped RNA or analogues - useful as substrates for  
PT influenza virus associated virally encoded endonuclease.

XX Claim 18; Page 14; 39pp; English.

XX AAT47264-T47280 represent capped RNA molecules produced by the method of  
CC the invention. The method of the invention is for producing capped RNA or  
CC RNA analogues. The method comprises reacting a RNA or analogue  
CC oligonucleotide with a phosphate addition agent to form a RNA or analogue  
CC mono-, di- or triphosphate, which is then capped. The presence of the cap  
CC is important for mRNA maturation, initiation of translation, and protects  
CC the mRNA against various RNases present in the cell. The capped RNA or

CC oligonucleotide with a phosphate addition agent to form a RNA or analogue  
CC mono-, di- or triphosphate, which is then capped. The presence of the cap  
CC is important for mRNA maturation, initiation of translation, and protects  
CC the mRNA against various RNases present in the cell. The capped RNA or  
CC analogue is an influenza endonuclease aptamer, useful for treating or  
CC preventing an influenza infection in an animal. The synthetic capped RNA  
CC are substrates for virally encoded endonuclease associated with influenza  
CC virus. The short non-extendible (due to their length or because of the  
CC modification of the 3' end of the oligo) RNA molecules are potent  
CC inhibitors of the cleavage of capped RNA by influenza endonuclease. They  
CC may be used to investigate viral and cellular mechanisms of  
CC transcription/translation, or mRNA maturation  
XX

SQ Sequence 19 BP; 3 A; 1 C; 1 G; 0 T; 14 U; 0 Other;

Query Match 0.5%; Score 13.2; DB 1; Length 19;  
Best Local Similarity 83.3%; Pred. No. 4.7e+03;  
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2785 GAAAAAAAAAAAAAAAAA 2802  
||||| ||||| |||||  
Db 19 GAAATTAATAATAAAA 2

RESULT 5245  
AAT47264/C  
ID AAT47264 standard; RNA; 19 BP.

XX AAT47264;

XX 27-AUG-1997 (first entry)

XX 5' fragment of alfalfa mosaic virus.

XX Capped RNA molecule; mRNA maturation; translation initiation; influenza;  
KW endonuclease aptamer; RNase; therapy; inhibitor; ss.

XX Synthetic.

XX Key Location/Qualifiers  
FH modified\_base 1  
FT /\*tag= a  
FT /mod\_base= triphosphorylated  
FT modified\_base 2  
FT /\*tag= b  
FT /mod\_base= 2'-O-methyluridine  
XX

PN WO9640159-A1.

XX 19-DEC-1996.

XX 03-JUN-1996; 96WO-US008394.

XX 07-JUN-1995; 95US-00480068.

XX (MERI ) MERCK & CO INC.

XX Benseler F, Cole JL, Kuo LC, Olsen DB;

XX WPI; 1997-051868/05.

XX Production of capped RNA or analogues - useful as substrates for  
PT influenza virus associated virally encoded endonuclease.

XX Claim 18; Page 12; 39pp; English.

XX AAT47264-T47280 represent capped RNA molecules produced by the method of  
CC the invention. The method of the invention is for producing capped RNA or  
CC RNA analogues. The method comprises reacting a RNA or analogue  
CC oligonucleotide with a phosphate addition agent to form a RNA or analogue  
CC mono-, di- or triphosphate, which is then capped. The presence of the cap  
CC is important for mRNA maturation, initiation of translation, and protects  
CC the mRNA against various RNases present in the cell. The capped RNA or



CC analogue is an influenza endonuclease aptamer, useful for treating or  
CC preventing an influenza infection in an animal. The synthetic capped RNA  
CC are substrates for virally encoded endonuclease associated with influenza  
CC virus. The short non-extendible (due to their length or because of the  
CC modification of the 3' end of the oligo) RNA molecules are potent  
CC inhibitors of the cleavage of capped RNA by influenza endonuclease. They  
CC may be used to investigate viral and cellular mechanisms of  
CC transcription/translation, or mRNA maturation  
XX  
SQ Sequence 19 BP; 3 A; 1 C; 1 G; 0 T; 14 U; 0 Other;

Query Match 0.5%; Score 13.2; DB 1; Length 19;  
Best Local Similarity 83.3%; Pred. No. 4.7e+03;  
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2785 GAAAAAATAAAAAA 2802  
||||| ||||| |||||  
Db 19 GAAAAATTAAAAATAAAAA 2

RESULT 5246  
AAT47272/c  
ID AAT47272 standard; RNA; 19 BP.

XX  
AC AAT47272;  
XX  
DT 28-AUG-1997 (first entry)  
XX  
DE Capped RNA influenza endonuclease substrate #6.

XX Capped RNA molecule; mRNA maturation; translation initiation; influenza;  
KW endonuclease aptamer; RNase; therapy; inhibitor; ss.  
XX  
OS Synthetic.

Key	Location/Qualifiers
modified_base 1	/*tag= a
modified_base 2	/mod_base= triphosphorylated
modified_base 6	/*tag= b
modified_base 12	/mod_base= 2'-O-methyluridine
modified_base 12	/*tag= c
modified_base 12	/mod_base= 2'-deoxy-2'-fluoro-uridine
modified_base 13	/*tag= d
modified_base 13	/mod_base= 2'-deoxy-2'-fluoro-uridine
modified_base 13	/*tag= e
modified_base 13	/mod_base= 2'-deoxy-2'-fluoro-adenosine

WO9640159-A1.  
19-DEC-1996.  
03-JUN-1996; 96WO-US008394.  
07-JUN-1995; 95US-00480068.  
(MERI ) MERCK & CO INC.  
Benseler F, Cole JL, Kuo LC, Olsen DB;  
WPI; 1997-051868/05.  
Production of capped RNA or analogues - useful as substrates for  
influenza virus associated virally encoded endonuclease.

Claim 18; Page 14; 39pp; English.  
AAT47264-T47280 represent capped RNA molecules produced by the method of  
the invention. The method of the invention is for producing capped RNA or  
the invention. The method of the invention is for producing capped RNA or

CC RNA analogues. The method comprises reacting a RNA or analogue  
CC oligonucleotide with a phosphate addition agent to form a RNA or analogue  
CC mono-, di- or triphosphate, which is then capped. The presence of the cap  
CC is important for mRNA maturation, initiation of translation, and protects  
CC the mRNA against various RNases present in the cell. The capped RNA or  
CC analogue is an influenza endonuclease aptamer, useful for treating or  
CC preventing an influenza infection in an animal. The synthetic capped RNA  
CC are substrates for virally encoded endonuclease associated with influenza  
CC virus. The short non-extendible (due to their length or because of the  
CC modification of the 3' end of the oligo) RNA molecules are potent  
CC inhibitors of the cleavage of capped RNA by influenza endonuclease. They  
CC may be used to investigate viral and cellular mechanisms of  
CC transcription/translation, or mRNA maturation  
XX  
SQ Sequence 19 BP; 3 A; 1 C; 1 G; 0 T; 14 U; 0 Other;

Query Match 0.5%; Score 13.2; DB 1; Length 19;  
Best Local Similarity 83.3%; Pred. No. 4.7e+03;  
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2785 GAAAAAATAAAAAA 2802  
||||| ||||| |||||  
Db 19 GAAAAATTAAAAATAAAAA 2

RESULT 5247  
AAT47278/c  
ID AAT47278 standard; RNA; 19 BP.

XX  
AC AAT47278;  
XX  
DT 28-AUG-1997 (first entry)  
XX  
DE Capped RNA influenza endonuclease substrate #10.

XX Capped RNA molecule; mRNA maturation; translation initiation; influenza;  
KW endonuclease aptamer; RNase; therapy; inhibitor; ss.  
XX  
OS Synthetic.

Key	Location/Qualifiers
modified_base 1	/*tag= a
modified_base 2	/mod_base= triphosphorylated
modified_base 13	/*tag= b
modified_base 13	/mod_base= 2'-O-methyluridine
modified_base 13	/*tag= c
modified_base 13	/mod_base= phosphorothioated

WO9640159-A1.  
19-DEC-1996.  
03-JUN-1996; 96WO-US008394.  
07-JUN-1995; 95US-00480068.  
(MERI ) MERCK & CO INC.  
Benseler F, Cole JL, Kuo LC, Olsen DB;  
WPI; 1997-051868/05.  
Production of capped RNA or analogues - useful as substrates for  
influenza virus associated virally encoded endonuclease.

Claim 18; Page 15; 39pp; English.  
AAT47264-T47280 represent capped RNA molecules produced by the method of  
the invention. The method of the invention is for producing capped RNA or  
RNA analogues. The method comprises reacting a RNA or analogue

CC oligonucleotide with a phosphate addition agent to form a RNA or analogue  
CC mono-, di- or triphosphate, which is then capped. The presence of the cap  
CC is important for mRNA maturation, initiation of translation, and protects  
CC the mRNA against various RNases present in the cell. The capped RNA or  
CC analogue is an influenza endonuclease aptamer, useful for treating or  
CC preventing an influenza infection in an animal. The synthetic capped RNA  
CC are substrates for virally encoded endonuclease associated with influenza  
CC virus. The short non-extendible (due to their length or because of the  
CC modification of the 3' end of the oligo) RNA molecules are potent  
CC inhibitors of the cleavage of capped RNA by influenza endonuclease. They  
CC may be used to investigate viral and cellular mechanisms of  
CC transcription/translation, or mRNA maturation

XX Sequence 19 BP; 3 A; 1 C; 1 G; 0 T; 14 U; 0 Other;

Query Match 0.5%; Score 13.2; DB 1; Length 19;  
Best Local Similarity 83.3%; Pred. No. 4.7e+03;  
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2785 GAAAAAAAAAAAAA 2802  
Db 19 GAAATTAATAAAAA 2

RESULT 5248

AAT47267/c  
ID AAT47267 standard; RNA; 19 BP.

AC AAT47267;

DT 28-AUG-1997 (first entry)

DE Capped RNA influenza endonuclease substrate #1.

XX Capped RNA molecule; mRNA maturation; translation initiation; influenza;  
KW endonuclease aptamer; RNase; therapy; inhibitor; ss.

OS Synthetic.

Key Location/Qualifiers

FT modified\_base 1 /\*tag= a  
FT /mod\_base= triphosphorylated  
FT modified\_base 2  
FT /\*tag= b  
FT /mod\_base= 2'-O-methyluridine

XX WO9640159-A1.

PN 19-DEC-1996.

XX 03-JUN-1996; 96WO-US008394.

XX 07-JUN-1995; 95US-00480068.

XX (MERI ) MERCK & CO INC.

XX Benseler F, Cole JL, Kuo LC, Olsen DB;

XX WPI; 1997-051868/05.

PT Production of capped RNA or analogues - useful as substrates for  
PT influenza virus associated virally encoded endonuclease.

XX Claim 18; Page 13; 39pp; English.

CC AAT47264-T47280 represent capped RNA molecules produced by the method of  
CC the invention. The method of the invention is for producing capped RNA or  
CC RNA analogues. The method comprises reacting a RNA or analogue  
CC oligonucleotide with a phosphate addition agent to form a RNA or analogue  
CC mono-, di- or triphosphate, which is then capped. The presence of the cap  
CC is important for mRNA maturation, initiation of translation, and protects  
CC the mRNA against various RNases present in the cell. The capped RNA or

CC analogue is an influenza endonuclease aptamer, useful for treating or  
CC preventing an influenza infection in an animal. The synthetic capped RNA  
CC are substrates for virally encoded endonuclease associated with influenza  
CC virus. The short non-extendible (due to their length or because of the  
CC modification of the 3' end of the oligo) RNA molecules are potent  
CC inhibitors of the cleavage of capped RNA by influenza endonuclease. They  
CC may be used to investigate viral and cellular mechanisms of  
CC transcription/translation, or mRNA maturation

XX Sequence 19 BP; 3 A; 1 C; 1 G; 0 T; 14 U; 0 Other;

Query Match 0.5%; Score 13.2; DB 1; Length 19;  
Best Local Similarity 83.3%; Pred. No. 4.7e+03;  
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2785 GAAAAAAAAAAAAA 2802  
Db 19 GAAATTAATAAAAA 2

RESULT 5249

AAT47270/c  
ID AAT47270 standard; RNA; 19 BP.

AC AAT47270;

DT 28-AUG-1997 (first entry)

DE Capped RNA influenza endonuclease substrate #4.

XX Capped RNA molecule; mRNA maturation; translation initiation; influenza;  
KW endonuclease aptamer; RNase; therapy; inhibitor; ss.

OS Synthetic.

Key Location/Qualifiers

FT modified\_base 1 /\*tag= a  
FT /mod\_base= triphosphorylated  
FT modified\_base 2 /\*tag= b  
FT /mod\_base= 2'-O-methyluridine  
FT modified\_base 13  
FT /\*tag= c  
FT /mod\_base= 2'-deoxy-2'-fluoro-adenosine

XX WO9640159-A1.

PN 19-DEC-1996.

XX 03-JUN-1996; 96WO-US008394.

XX 07-JUN-1995; 95US-00480068.

XX (MERI ) MERCK & CO INC.

XX Benseler F, Cole JL, Kuo LC, Olsen DB;

XX WPI; 1997-051868/05.

PT Production of capped RNA or analogues - useful as substrates for  
PT influenza virus associated virally encoded endonuclease.

XX Claim 18; Page 13; 39pp; English.

CC AAT47264-T47280 represent capped RNA molecules produced by the method of  
CC the invention. The method of the invention is for producing capped RNA or  
CC RNA analogues. The method comprises reacting a RNA or analogue  
CC oligonucleotide with a phosphate addition agent to form a RNA or analogue  
CC mono-, di- or triphosphate, which is then capped. The presence of the cap  
CC is important for mRNA maturation, initiation of translation, and protects  
CC the mRNA against various RNases present in the cell. The capped RNA or  
CC analogue is an influenza endonuclease aptamer, useful for treating or

CC preventing an influenza infection in an animal. The synthetic capped RNA  
CC are substrates for virally encoded endonuclease associated with influenza  
CC virus. The short non-extendible (due to their length or because of the  
CC modification of the 3' end of the oligo) RNA molecules are potent  
CC inhibitors of the cleavage of capped RNA by influenza endonuclease. They  
CC may be used to investigate viral and cellular mechanisms of  
CC transcription/translation, or mRNA maturation

XX Sequence 19 BP; 3 A; 1 C; 1 G; 0 T; 14 U; 0 Other;

QY Query Match 0.5%; Score 13.2; DB 1; Length 19;  
Best Local Similarity 83.3%; Pred. No. 4.7e+03;  
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2785 GAAAAAAAAAAAAAAAAA 2802  
Db 19 GAAATTAATAATAAAA 2

RESULT 5250  
ABA91534  
ID ABA91534 standard; DNA; 20 BP.

XX ABA91534;

DT 23-APR-2002 (first entry)

XX DNA oligonucleotide AGT02022 used to test RNase H cleavage.

XX Nucleic acid detection; probe; mismatch; ss.

OS Synthetic.

XX Key Location/Qualifiers

FT misc\_feature 12 /\*tag= a

FT /note= "mismatch to target DNA"

FT misc\_feature 13

FT /\*tag= b

FT /note= "mismatch to target DNA"

XX WO200206531-A2.

XX 24-JAN-2002.

XX 12-JUL-2001; 2001WO-US022166.

XX 14-JUL-2000; 2000US-00616761.

XX 30-MAR-2001; 2001US-00823647.

XX (GENE-) APPLIED GENE TECHNOLOGIES INC.

XX Dattagupta N;

XX WPI; 2002-171819/22.

XX Probes for detecting target nucleotide sequence in sample, has sequence  
PT that forms hairpin structure having a double-stranded segment and single-  
PT stranded loop collectively forming region complementary to target  
PT sequence.

XX Example 5; Page 50; 72pp; English.

XX The present sequence is that of oligonucleotide AGT02022, which contains  
CC a single mismatch with a target DNA oligonucleotide (see ABA91531). It is  
CC one of a set of oligonucleotides (see ABA91532-37) containing  
CC mismatch(es) to the target DNA that were tested in a hybridisation/RNase  
CC H cleavage assay. The results showed that 2 mismatches between the target  
CC and the probe ablated RNase H cleavage. The invention provides probes for  
CC nucleic acid hybridisation. The probes form a hairpin structure  
CC comprising a double-stranded stem and a single-stranded loop, and are  
CC capable of both intramolecular and intermolecular hybridisation. The  
CC double-stranded stem may comprise a methylphosphonate DNA:RNA hybrid that

CC is resistant to RNase H cleavage. When the probe hybridises with a target  
CC DNA, the RNA strand in the DNA:RNA duplex becomes sensitive to RNase H  
CC treatment and can be removed. Arrays and methods for nucleic acid  
CC hybridisation using the probes are provided

XX Sequence 20 BP; 16 A; 0 C; 2 G; 2 T; 0 U; 0 Other;

QY Query Match 0.5%; Score 13.2; DB 1; Length 20;  
Best Local Similarity 83.3%; Pred. No. 5e+03;  
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1514 AAATAAAATTGGACGAA 1531  
Db 2 AAAAAAATTGGAAAAA 19

RESULT 5251  
ABZ85667/c  
ID ABZ85667 standard; DNA; 20 BP.

XX ABZ85667;

DT 17-OCT-2003 (first entry)

XX Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.

OS Homo sapiens.

XX WO200285308-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.

XX Claim 15; SEQ ID NO 909; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,







PA (MERI ) MERCK & CO INC.  
XX  
PI Benseler F, Cole JL, Kuo LC, Olsen DB;  
XX  
DR WPI; 1997-051868/05.  
XX  
XX Production of capped RNA or analogues - useful as substrates for  
PT influenza virus associated virally encoded endonuclease.  
XX  
PS Claim 18; Page 12; 39pp; English.  
XX  
XX AAT47264-T47280 represent capped RNA molecules produced by the method of  
CC the invention. The method of the invention is for producing capped RNA or  
CC RNA analogues. The method comprises reacting a RNA or analogue  
CC oligonucleotide with a phosphate addition agent to form a RNA or analogue  
CC mono-, di- or triphosphate, which is then capped. The presence of the cap  
CC is important for mRNA maturation, initiation of translation, and protects  
CC the mRNA against various RNases present in the cell. The capped RNA or  
CC analogue is an influenza endonuclease aptamer, useful for treating or  
CC preventing an influenza infection in an animal. The synthetic capped RNA  
CC are substrates for virally encoded endonuclease associated with influenza  
CC virus. The short non-extendible (due to their length or because of the  
CC modification of the 3' end of the oligo) RNA molecules are potent  
CC inhibitors of the cleavage of capped RNA by influenza endonuclease. They  
CC may be used to investigate viral and cellular mechanisms of  
CC transcription/translation, or mRNA maturation  
XX  
SQ Sequence 20 BP; 3 A; 1 C; 2 G; 0 T; 14 U; 0 Other;  
  
Query Match 0.5%; Score 13.2; DB 1; Length 20;  
Best Local Similarity 83.3%; Pred. No. 5e+03;  
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
  
QY 2785 GAAAAAAAAAAAAAAAAA 2802  
Db ||||| ||||| ||||| |||||  
20 GAAATTAATAATAAAA 3  
  
RESULT 5256  
ABL57554/c  
ID ABL57554 standard; DNA; 20 BP.  
XX  
AC ABL57554;  
XX  
DT 26-JUL-2002 (first entry)  
XX  
DE Synthetic deoxyribonucleotide poly u.  
XX  
KW Concentration; quantification; mutation detection; polymorphic;  
KW polymerase chain reaction; PCR; ss.  
XX  
OS Synthetic.  
XX  
PN EP1046717-A2.  
XX  
PD 25-OCT-2000.  
XX  
PF 20-APR-2000; 2000EP-00108643.  
XX  
PR 20-APR-1999; 99JP-00111601.  
XX  
XX (NIBI-) JAPAN BIOINDUSTRY ASSOC.  
PA (AGEN ) AGENCY OF IND SCI & TECHNOLOGY.  
PA (KANK-) KANKYO ENG CO LTD.  
XX  
PI Kurane R, Kanagawa T, Kamagata Y, Kurata S, Yamada K, Yokomaku T;  
PI Koyama O, Furusho K;  
XX  
DR WPI; 2000-657765/64.  
XX  
PT Determining the concentration of a target nucleic acid, useful e.g. for  
PT detecting genetic mutations, comprises using a fluorescently labeled  
PT probe in which emission is reduced by binding to the target nucleic acid.

XX  
PS  
XX Example 6; Page 23; 55pp; English.  
CC  
CC The invention relates to the determination of the concentration of a  
CC nucleic acid target, using a fluorescently labeled probe which produces  
CC reduced fluorescence emission when hybridised to the target nucleic acid.  
CC The method comprises measuring the reduction in emission caused by  
CC hybridisation. The new method is particularly used to quantify target  
CC nucleic acids by a real-time polymerase chain reaction, e.g. for  
CC quantifying microbial cells in co-cultures or symbiotic systems, for  
CC detecting gene mutations or polymorphisms, and for analysing melting  
CC curves of target nucleic acids to determine a Tm value. Methods of the  
CC invention allow target nucleic acids to be quantified quickly, easily and  
CC accurately. Particularly there is no need to remove unbound probe, and no  
CC materials are introduced that inhibit amplification by Taq polymerase (so  
CC conventional PCR conditions can be used). The specificity of PCR is kept  
CC high (amplification of primer dimers is delayed), and the limit of  
CC quantitation is reduced. Complex probes are not needed, and amplification  
CC can be monitored in real time. The working graph for data analysis  
CC (automatically generated by a computer) has a higher correlation  
CC coefficient than conventional graphs so more accurate quantitation is  
CC possible. The current sequence represents a synthetic  
CC deoxyribonucleotide that was used for investigating the effects of  
CC the number of G(s) in each target nucleic acid, and the number of G(s) in  
CC its corresponding invention nucleic acid probe  
XX  
SQ Sequence 20 BP; 4 A; 0 C; 0 G; 16 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.2; DB 1; Length 20;  
Best Local Similarity 83.3%; Pred. No. 5e+03;  
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
  
QY 2786 AAAAAAAAAAAAAAAAAA 2803  
Db ||||| ||||| ||||| |||||  
20 AAAAAAAAAAATATATA 3  
  
RESULT 5257  
ABA97633/c  
ID ABA97633 standard; DNA; 20 BP.  
XX  
AC ABA97633;  
XX  
DT 11-APR-2002 (first entry)  
XX  
DE Poly o nucleotide sequence.  
XX  
KW ss; fluorochrome; nucleic acid probe; fluorescence.  
KW Unidentified.  
XX  
PN JP2001286300-A.  
XX  
PD 16-OCT-2001.  
XX  
PF 20-APR-2000; 2000JP-00120097.  
XX  
PR 20-APR-1999; 99JP-00111601.  
PR 24-AUG-1999; 99JP-00236666.  
PR 30-AUG-1999; 99JP-00242693.  
PR 01-FEB-2000; 2000JP-00028896.  
XX  
XX (BIOI-) BIOINDUSTRY KYOKAI SH.  
PA (KANK-) KANKYO ENG KK.  
PA (KEIZ-) KEIZAI SANGYOSHO SANGYO GIJUTSU SOGO KEN.  
XX  
DR WPI; 2002-134193/18.  
XX  
PT Measurement of nucleic acids, using a nucleic acid probe and analysis of  
PT the obtained data.  
XX  
PS Example 6; Page 18; 34pp; Japanese.  
XX



XX ABZ87698;  
AC  
XX 17-OCT-2003 (first entry)  
XX  
XX Human oligonucleotide sequence.  
DE  
XX Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
XX Homo sapiens.  
OS  
XX WO200285308-A2.  
XX  
PN 31-OCT-2002.  
PD  
XX 23-APR-2002; 2002WO-US013135.  
XX  
PF 24-APR-2001; 2001US-0286137P.  
XX  
PR (EPIG-) EPIGENESIS PHARM INC.  
XX  
PA Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
PI  
XX WPI; 2003-229219/22.  
DR  
XX Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
PS Disclosure; SEQ ID NO 2940; 872pp; English.  
XX  
CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 16 A; 4 C; 0 G; 0 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.2; DB 1; Length 20;  
Best Local Similarity 83.3%; Pred. No. 5e+03;  
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 2786 AAAAAAAAAAAAAAAAAA 2803  
| | | | | | | | | | | | | | | | | | | | | |  
Db 1 AAAAAAAAACAAAACCAAA 18  
RESULT 5261  
AAH91825/c  
ID AAH91825 standard; DNA; 21 BP.

XX AAH91825;  
AC  
XX 09-OCT-2001 (first entry)  
XX  
XX Human inflammatory bowel disease associated polymorphic site #900.  
DE  
XX Human; inflammatory bowel disease; Crohn's disease; ulcerative colitis;  
KW single nucleotide polymorphism; SNP; chromosome 19p13; paternity test;  
KW chromosome 5q31-33; forensic test; gene therapy; ds.  
XX Homo sapiens.  
OS  
XX Key Location/Qualifiers  
FH misc\_feature 11  
FT /\*tag= a  
FT /note= "SNP, optionally T or A at this position"  
XX  
XX WO200142511-A2.  
XX  
XX 14-JUN-2001.  
PD  
XX 11-DEC-2000; 2000WO-US033632.  
XX  
XX 10-DEC-1999; 99US-0170257P.  
PR 10-APR-2000; 2000US-0196046P.  
PR  
XX (WHED ) WHITEHEAD INST BIOMEDICAL RES.  
PA (ELLI-) ELLIPSIS BIOTHERAPEUTICS CORP.  
PA  
XX Daly M, Hudson TJ, Lander ES, Rioux J, Siminovitch K;  
PI WPI; 2001-367874/38.  
XX  
DR Testing for the presence of polymorphisms associated with inflammatory  
PT bowel disease, using a hybridization assay.  
XX  
XX Claim 1; Page 76; 463pp; English.  
PS  
XX The present invention describes a method for detecting the presence of  
CC polymorphisms associated with inflammatory bowel diseases such as  
CC ulcerative colitis and Crohn's disease. The methods can be used to detect  
CC the presence of genetic polymorphisms associated with inflammatory bowel  
CC disease and correlating their occurrence with disease states. They may be  
CC used in this way for phenotypic correlations, forensics, paternity  
CC testing, medicine and genetic analysis. The present sequence is a  
CC polymorphic site described in the exemplification of the invention  
XX  
SQ Sequence 21 BP; 1 A; 3 C; 0 G; 16 T; 0 U; 1 Other;  
Query Match 0.5%; Score 13.2; DB 1; Length 21;  
Best Local Similarity 78.9%; Pred. No. 5.2e+03;  
Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 2786 AAAAAAAAAAAAAAAAAA 2804  
| | | | | | | | | | | | | | | | | | | | | |  
Db 21 AAAAAAAAAANGATAAGA 3  
RESULT 5262  
ABK70498/c  
ID ABK70498 standard; DNA; 21 BP.  
XX  
AC ABK70498;  
XX  
XX 15-JUL-2002 (first entry)  
DT  
XX In-situ analysis synthetic probe #63.  
XX  
XX Human; oligonucleotide label-domain; CMV; cytomegalovirus; EBV;  
KW Epstein-Barr virus; lambda-immunoglobulin light chain; hapten;  
KW kappa-immunoglobulin light chain; repetitive Alu sequence; EBER;  
KW Epstein-Barr early RNA; probe; ss.



XX OS Synthetic.  
XX PN WO200222874-A2.  
XX PD 21-MAR-2002.  
XX PF 06-SEP-2001; 2001WO-US028014.  
XX PR 15-SEP-2000; 2000US-0233177P.  
XX PA (VENT-) VENTANA MEDICAL SYSTEMS INC.  
XX PI Utermohlen JG, Connaughton J;  
XX DR WPI; 2002-371972/40.  
XX PT Novel oligonucleotide label-domain for incorporation into oligonucleotide  
PT probes useful for detecting or localizing nucleic acid target genes  
PT within a cell or tissue sample.  
XX PS Example 4; Page 19; 71pp; English.  
XX CC The present invention relates to a new oligonucleotide label-domain  
CC comprising the sequence (CTATT)n and its complement (AAATAG)n, where  
CC n is 1. The probe sets of the invention are useful for detecting kappa or  
CC lambda-immunoglobulin light chain mRNA or corresponding heteronuclear  
CC RNA, CMV (cytomegalovirus) immediate early RNA, EBV (Epstein-Barr virus)  
CC early RNA 1 and RNA 2, and human Alu repetitive satellite genomic  
CC sequences. The invention is a useful generic sequence for incorporation  
CC into oligonucleotide probes for detecting gene-specific sequences within  
CC cells or tissue samples in situ hybridisation analysis and for  
CC attaching a label to immunoglobulins or other proteins for detecting  
CC haptens and antigens in immunohistochemical analyses. The present nucleic  
CC acid sequence represents one of a collection (ABK70376-ABK70501) of  
CC oligonucleotide probes that were used in the invention for detecting or  
CC localising a plurality nucleic acid target gene or antigen within a cell  
CC or tissue sample  
XX SQ Sequence 21 BP; 2 A; 3 C; 0 G; 16 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.2; DB 1; Length 21;  
Best Local Similarity 83.3%; Pred. No. 5.2e+03;  
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
  
QY 2786 AAAAAAAAAAAAAAAAAA 2803  
Db 21 AAAAAAAAAATAGAAAA 4  
  
RESULT 5263  
ABQ78573/c  
ID ABQ78573 standard; DNA; 21 BP.  
XX AC ABQ78573;  
XX DT 25-NOV-2002 (first entry)  
XX DE RT-PCR primer used to amplify mucin 5AC (MUC5AC) cDNA.  
XX KW Human; mucin 4; MUC4; peripheral blood monocyte; PBMC; tumour marker;  
KW pancreatic cancer; pancreatic adenocarcinoma; MUC5AC; PCR; primer; ss.  
XX OS Homo sapiens.  
XX PN WO200259368-A1.  
XX PD 01-AUG-2002.  
XX PF 07-DEC-2001; 2001WO-US046887.  
XX PR 08-DEC-2000; 2000US-00733444.  
XX

PA (UYNE-) UNIV NEBRASKA.  
XX PI Batra SK, Brand RE, Ringel J, Faulamnn G, Lohr M, Varsheny GC;  
XX DR WPI; 2002-643346/69.  
XX PT Diagnosing pancreatic adenocarcinoma, particularly for the early  
PT detection of the pancreatic cancer, comprises employing primers or  
PT antibodies that are specific for the MUC4-encoding nucleic acid or MUC4  
PT protein, respectively.  
XX PS Example 1; Page 29; 63pp; English.  
XX CC PCR primers ABQ78573-74 were used to amplify human mucin 5AC (MUC5AC)  
CC cDNA. Peripheral blood monocytes (PBMCs) isolated from pancreatic cancer  
CC patients are positive for MUC4, while MUC4 expression is not observed in  
CC PBMCs isolated from normal patients or from patients suffering from  
CC chronic pancreatitis or other types of cancers. Expression of MUC4 can  
CC therefore be used as an indication of pancreatic cancer. The  
CC specification describes a method for detecting a MUC4-encoding nucleic  
CC acid or a MUC4 protein in a biological sample as a tumour marker for  
CC pancreatic cancer. The method comprises contacting a nucleic acid  
CC extracted from the sample with oligonucleotide primers that specifically  
CC hybridise to the MUC4 nucleic acid; or contacting a biological sample  
CC with an antibody (or its fragment) that has specific binding affinity for  
CC MUC4. The method is useful for diagnosing pancreatic cancer or pancreatic  
CC adenocarcinoma, particularly for early detection of pancreatic cancer  
XX SQ Sequence 21 BP; 5 A; 6 C; 6 G; 4 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.2; DB 1; Length 21;  
Best Local Similarity 83.3%; Pred. No. 5.2e+03;  
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
  
QY 718 CCTGTTGCTGCACGATCA 735  
Db 18 CCTGCTGCTGGATGATCA 1  
  
RESULT 5264  
AAT28045/c  
ID AAT28045 standard; DNA; 22 BP.  
XX AC AAT28045;  
XX DT 31-DEC-1996 (first entry)  
XX DE 3'-primer B for human fibroblasts.  
XX KW Polymerase chain reaction; PCR; primer; amplify; human; fibroblast; AIDS;  
KW enhanced differential display; EDD; mRNA preparation; senescent cell;  
KW quiescent cell; dividing cell; senescence-related gene; gene expression;  
KW non-senescent cell; age-related lipofuscin; retina; therapy; liver spot;  
KW donor tissue; senescent melanocyte; melanin; hypopigmentation; ss.  
XX OS Synthetic.  
XX PN WO9613610-A2.  
XX PD 09-MAY-1996.  
XX PF 24-AUG-1995; 95WO-US011230.  
XX PR 31-OCT-1994; 94US-00332420.  
XX PA (GERO-) GERON CORP.  
XX PI Linskens MHK, Hirsch KS, Villeponteau B, Feng J, Funk W, West MD;  
XX DR WPI; 1996-251464/25.  
XX PT Identifying, isolating and regulating senescence-related genes - useful  
PT to ameliorate problems associated with accumulation of senescent cells,  
PT

PT e.g. age-related lipofuscin accumulation in the retina and AIDS.  
XX  
PS Claim 6; Page 25; 135pp; English.  
XX  
CC AAT28044-T28075 represent primers for human fibroblasts in enhanced  
CC differential display (EDD), which is used in conjunction with the method  
CC of the invention. EDD is an mRNA preparation method. AAT28044-T28055  
CC represent T-rich 3'-primers, while AAT28056-T28075 are randomly selected  
CC 5'-primers used in EDD of human fibroblasts. The 3'-primers used are  
CC complementary to the poly-A tail of the mRNA. In the method of the  
CC invention, mRNA is isolated from a senescent cell, and a young quiescent  
CC cell, and the mRNAs are amplified in separate reaction mixtures. The  
CC amplified sequences are then separated by size or charge, and the  
CC products are analysed to identify a gene from young quiescent cells and  
CC dividing cells, that is present at a different level from senescent  
CC cells. The method can be used for the rapid and efficient identification  
CC and isolation of senescence-related genes and gene products, and to  
CC detect and distinguish between senescent and non-senescent cells. It can  
CC also be used to destroy cells expressing senescence specific (or related)  
CC gene products, and to screen for compounds capable of altering gene  
CC expression in senescent cells. The method can also be used to ameliorate  
CC problems associated with the accumulation of senescent cells such as age-  
CC related lipofuscin accumulation in the retina, and in the treatment of  
CC AIDS. Also, the method can be used to distinguish young cells from  
CC senescent cells in donor tissue, which is useful in removing senescent  
CC melanocytes overexpressing melanin which cause hypopigmentation, or liver  
CC spots  
XX  
SQ Sequence 22 BP; 2 A; 5 C; 3 G; 12 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.2; DB 1; Length 22;  
Best Local Similarity 83.3%; Pred. No. 5.4e+03;  
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
  
QY 1978 GAAAAAAAGAAAGCTGTG 1995  
||||||| ||||| ||  
Db 21 GAAAAAAAGAAAGCTTG 4  
  
RESULT 5265  
AAT28046/c  
ID AAT28046 standard; DNA; 22 BP.  
XX  
AC AAT28046;  
XX  
DT 31-DEC-1996 (first entry)  
XX  
DE 3'-primer C for human fibroblasts.  
XX  
KW Polymerase chain reaction; PCR; primer; amplify; human; fibroblast; AIDS;  
KW enhanced differential display; EDD; mRNA preparation; senescent cell;  
KW quiescent cell; dividing cell; senescence-related gene; gene expression;  
KW non-senescent cell; age-related lipofuscin; retina; therapy; liver spot;  
KW donor tissue; senescent melanocyte; melanin; hypopigmentation; ss.  
XX  
OS Synthetic.  
XX  
PN WO9613610-A2.  
XX  
PD 09-MAY-1996.  
XX  
PF 24-AUG-1995; 95WO-US011230.  
XX  
PR 31-OCT-1994; 94US-00332420.  
XX  
PA (GERO-) GERON CORP.  
XX  
PI Linskens MHK, Hirsch KS, Villeponteau B, Feng J, Funk W, West MD;  
XX WPI; 1996-251464/25.  
DR  
XX  
PT Identifying, isolating and regulating senescence-related genes - useful  
PT to ameliorate problems associated with accumulation of senescent cells,

PT e.g. age-related lipofuscin accumulation in the retina and AIDS.  
XX  
PS Claim 6; Page 25; 135pp; English.  
XX  
CC AAT28044-T28075 represent primers for human fibroblasts in enhanced  
CC differential display (EDD), which is used in conjunction with the method  
CC of the invention. EDD is an mRNA preparation method. AAT28044-T28055  
CC represent T-rich 3'-primers, while AAT28056-T28075 are randomly selected  
CC 5'-primers used in EDD of human fibroblasts. The 3'-primers used are  
CC complementary to the poly-A tail of the mRNA. In the method of the  
CC invention, mRNA is isolated from a senescent cell, and a young quiescent  
CC cell, and the mRNAs are amplified in separate reaction mixtures. The  
CC amplified sequences are then separated by size or charge, and the  
CC products are analysed to identify a gene from young quiescent cells and  
CC dividing cells, that is present at a different level from senescent  
CC cells. The method can be used for the rapid and efficient identification  
CC and isolation of senescence-related genes and gene products, and to  
CC detect and distinguish between senescent and non-senescent cells. It can  
CC also be used to destroy cells expressing senescence specific (or related)  
CC gene products, and to screen for compounds capable of altering gene  
CC expression in senescent cells. The method can also be used to ameliorate  
CC problems associated with the accumulation of senescent cells such as age-  
CC related lipofuscin accumulation in the retina, and in the treatment of  
CC AIDS. Also, the method can be used to distinguish young cells from  
CC senescent cells in donor tissue, which is useful in removing senescent  
CC melanocytes overexpressing melanin which cause hypopigmentation, or liver  
CC spots  
XX  
SQ Sequence 22 BP; 2 A; 4 C; 4 G; 12 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.2; DB 1; Length 22;  
Best Local Similarity 83.3%; Pred. No. 5.4e+03;  
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
  
QY 1978 GAAAAAAAGAAAGCTGTG 1995  
||||||| ||||| ||  
Db 21 GAAAAAAAGAAAGCTTG 4  
  
RESULT 5266  
AAT28044/c  
ID AAT28044 standard; DNA; 22 BP.  
XX  
AC AAT28044;  
XX  
DT 31-DEC-1996 (first entry)  
XX  
DE 3'-primer A for human fibroblasts.  
XX  
KW Polymerase chain reaction; PCR; primer; amplify; human; fibroblast; AIDS;  
KW enhanced differential display; EDD; mRNA preparation; senescent cell;  
KW quiescent cell; dividing cell; senescence-related gene; gene expression;  
KW non-senescent cell; age-related lipofuscin; retina; therapy; liver spot;  
KW donor tissue; senescent melanocyte; melanin; hypopigmentation; ss.  
XX  
OS Synthetic.  
XX  
PN WO9613610-A2.  
XX  
PD 09-MAY-1996.  
XX  
PF 24-AUG-1995; 95WO-US011230.  
XX  
PR 31-OCT-1994; 94US-00332420.  
XX  
PA (GERO-) GERON CORP.  
XX  
PI Linskens MHK, Hirsch KS, Villeponteau B, Feng J, Funk W, West MD;  
XX WPI; 1996-251464/25.  
DR  
XX  
PT Identifying, isolating and regulating senescence-related genes - useful  
PT to ameliorate problems associated with accumulation of senescent cells,

PT e.g. age-related lipofuscin accumulation in the retina and AIDS.  
XX Claim 6; Page 25; 135pp; English.  
PS  
XX AAT28044-T28075 represent primers for human fibroblasts in enhanced  
CC differential display (EDD), which is used in conjunction with the method  
CC of the invention. EDD is an mRNA preparation method. AAT28044-T28055  
CC represent T-rich 3'-primers, while AAT28056-T28075 are randomly selected  
CC 5'-primers used in EDD of human fibroblasts. The 3'-primers used are  
CC complementary to the poly-A tail of the mRNA. In the method of the  
CC invention, mRNA is isolated from a senescent cell, and a young quiescent  
CC cell, and the mRNAs are amplified in separate reaction mixtures. The  
CC amplified sequences are then separated by size or charge, and the  
CC products are analysed to identify a gene from young quiescent cells and  
CC dividing cells, that is present at a different level from senescent  
CC cells. The method can be used for the rapid and efficient identification  
CC and isolation of senescence-related genes and gene products, and to  
CC detect and distinguish between senescent and non-senescent cells. It can  
CC also be used to destroy cells expressing senescence specific (or related)  
CC gene products, and to screen for compounds capable of altering gene  
CC expression in senescent cells. The method can also be used to ameliorate  
CC problems associated with the accumulation of senescent cells such as age-  
CC related lipofuscin accumulation in the retina, and in the treatment of  
CC AIDS. Also, the method can be used to distinguish young cells from  
CC senescent cells in donor tissue, which is useful in removing senescent  
CC melanocytes overexpressing melanin which cause hypopigmentation, or liver  
CC spots  
XX  
SQ Sequence 22 BP; 2 A; 4 C; 3 G; 13 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.2; DB 1; Length 22;  
Best Local Similarity 83.3%; Pred. No. 5.4e+03;  
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1978 GAAAAAAAGAAAAAGTGTG 1995  
Db 21 GAAAAAAAGAAAAAGCTTG 4

RESULT 5267  
AAT58484/C  
ID AAT58484 standard; DNA; 22 BP.  
XX  
AC AAT58484;  
XX  
DT 21-MAR-1997 (first entry)  
XX  
DE First primer #1 for use in enhanced differential display method.  
XX  
KW Differential Display; Enhanced Differential Display; EDD; screening;  
KW gene expression; cell type; different; cell development; gene typing;  
KW identification; differentiation; aging; and disease; primer; PCR; ss.  
XX  
OS Synthetic.  
XX  
PN US5580726-A.  
XX  
PD 03-DEC-1996.  
XX  
PF 29-APR-1994; 94US-00235180.  
XX  
PR 29-APR-1994; 94US-00235180.  
XX  
PA (GERO-) GERON CORP.  
XX  
PI Linskens MHK, Feng J, Villeponteau B, Funk W;  
XX  
DR WPI; 1997-033564/03.  
XX  
PT Detection of differentially expressed mRNA mols. - using two-step  
PT polymerase chain reaction amplification method.  
XX  
PS Claim 9; Col 13; 15pp; English.

XX An improved method of Differential Display, named Enhanced Differential  
CC Display (EDD) has been designed as a technique for screening differences  
CC in gene expression between various cell types or between different stages  
CC of cell development. The technique is highly reproducible, leading to  
CC precise typing of the expressed genes in any given cell. EDD analysis  
CC permits the identification of novel genes involved in differentiation,  
CC aging and disease, and enables direct comparisons of different cell types  
CC and disease states. By using longer primers, and/or an alteration in the  
CC annealing temperatures, the number of false positives can be reduced.  
CC First, cDNA is prepared from total cellular RNA using 12 different 22-  
CC base oligonucleotides (AAT58484-95) that are targeted to the poly A tail  
CC of pol II mRNA transcripts. The last two bases of each primer varies so  
CC as to anchor the primer to the 3' end of different sets of mRNAs. A  
CC second set of 12 22-base oligo primers (AAT58472-83) is designed to  
CC randomly select a subset of cDNAs from each of the twelve 3' primers. PCR  
CC amplification of a subset of cDNAs is carried out in a two step process  
CC using particular 5' and 3' primers. The amplified gene products can then  
CC be directly sequenced or rapidly subcloned for DNA sequencing  
XX  
SQ Sequence 22 BP; 2 A; 4 C; 3 G; 13 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.2; DB 1; Length 22;  
Best Local Similarity 83.3%; Pred. No. 5.4e+03;  
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1978 GAAAAAAAGAAAAAGTGTG 1995  
Db 21 GAAAAAAAGAAAAAGCTTG 4

RESULT 5268  
AAT58485/C  
ID AAT58485 standard; DNA; 22 BP.  
XX  
AC AAT58485;  
XX  
DT 21-MAR-1997 (first entry)  
XX  
DE First primer #2 for use in enhanced differential display method.  
XX  
KW Differential Display; Enhanced Differential Display; EDD; screening;  
KW gene expression; cell type; different; cell development; gene typing;  
KW identification; differentiation; aging; and disease; primer; PCR; ss.  
XX  
OS Synthetic.  
XX  
PN US5530726-A.  
XX  
PD 03-DEC-1996.  
XX  
PF 29-APR-1994; 94US-00235180.  
XX  
PR 29-APR-1994; 94US-00235180.  
XX  
PA (GERO-) GERON CORP.  
XX  
PI Linskens MHK, Feng J, Villeponteau B, Funk W;  
XX  
DR WPI; 1997-033564/03.  
XX  
PT Detection of differentially expressed mRNA mols. - using two-step  
PT polymerase chain reaction amplification method.  
XX  
PS Claim 9; Col 13; 15pp; English.

XX An improved method of Differential Display, named Enhanced Differential  
CC Display (EDD) has been designed as a technique for screening differences  
CC in gene expression between various cell types or between different stages  
CC of cell development. The technique is highly reproducible, leading to  
CC precise typing of the expressed genes in any given cell. EDD analysis  
CC permits the identification of novel genes involved in differentiation,  
CC aging and disease, and enables direct comparisons of different cell types



CC and disease states. By using longer primers, and/or an alteration in the  
CC annealing temperatures, the number of false positives can be reduced.  
CC First, cDNA is prepared from total cellular RNA using 12 different 22-  
CC base oligonucleotides (AAT58484-95) that are targeted to the poly A tail  
CC of pol II mRNA transcripts. The last two bases of each primer varies so  
CC as to anchor the primer to the 3' end of different sets of mRNAs. A  
CC second set of 12 22-base oligo primers (AAT58472-83) is designed to  
CC randomly select a subset of cDNAs from each of the twelve 3' primers. PCR  
CC amplification of a subset of cDNAs is carried out in a two step process  
CC using particular 5' and 3' primers. The amplified gene products can then  
CC be directly sequenced or rapidly subcloned for DNA sequencing  
XX  
SQ Sequence 22 BP; 2 A; 5 C; 3 G; 12 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.2; DB 1; Length 22;  
Best Local Similarity 83.3%; Pred. No. 5.4e+03;  
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 1978 GAAAAAAGAAAGTGTG 1995  
Db 21 GAAAAAAGAAAGCTTG 4

RESULT 5269  
AAT58486/c  
ID AAT58486 standard; DNA; 22 BP.  
AC AAT58486;  
XX  
XX  
DT 21-MAR-1997 (first entry)  
XX  
DE First primer #3 for use in enhanced differential display method.  
XX  
KW Differential Display; Enhanced Differential Display; EDD; screening;  
KW gene expression; cell type; different; cell development; gene typing;  
KW identification; differentiation; aging; and disease; primer; PCR; ss.  
XX

OS Synthetic.  
XX  
XX US580726-A.  
XX  
PD 03-DEC-1996.  
XX  
PF 29-APR-1994; 94US-00235180.  
XX  
PR 29-APR-1994; 94US-00235180.  
XX  
PA (GERO-) GERON CORP.  
XX  
PI Linskens MHK, Feng J, Villeponteau B, Funk W;  
XX  
DR WPI; 1997-033564/03.  
XX  
XX  
PT Detection of differentially expressed mRNA mols. - using two-step  
PT polymerase chain reaction amplification method.  
XX  
PS Claim 9; Col 13; 15pp; English.  
XX

CC An improved method of Differential Display, named Enhanced Differential  
CC Display (EDD) has been designed as a technique for screening differences  
CC in gene expression between various cell types or between different stages  
CC of cell development. The technique is highly reproducible, leading to  
CC precise typing of the expressed genes in any given cell. EDD analysis  
CC permits the identification of novel genes involved in differentiation,  
CC aging and disease, and enables direct comparisons of different cell types  
CC and disease states. By using longer primers, and/or an alteration in the  
CC annealing temperatures, the number of false positives can be reduced.  
CC First, cDNA is prepared from total cellular RNA using 12 different 22-  
CC base oligonucleotides (AAT58484-95) that are targeted to the poly A tail  
CC of pol II mRNA transcripts. The last two bases of each primer varies so  
CC as to anchor the primer to the 3' end of different sets of mRNAs. A  
CC second set of 12 22-base oligo primers (AAT58472-83) is designed to  
CC randomly select a subset of cDNAs from each of the twelve 3' primers. PCR

CC amplification of a subset of cDNAs is carried out in a two step process  
CC using particular 5' and 3' primers. The amplified gene products can then  
CC be directly sequenced or rapidly subcloned for DNA sequencing  
XX  
SQ Sequence 22 BP; 2 A; 4 C; 4 G; 12 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.2; DB 1; Length 22;  
Best Local Similarity 83.3%; Pred. No. 5.4e+03;  
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 1978 GAAAAAAGAAAGTGTG 1995  
Db 21 GAAAAAAGAAAGCTTG 4

RESULT 5270  
AAV03675/c  
ID AAV03675 standard; DNA; 22 BP.  
XX  
AC AAV03675;  
XX  
DT 21-MAY-1998 (first entry)  
XX  
DE Oligo dT primer.  
XX  
KW Jagged; Notch; angiogenesis; endothelial cell; migration; human;  
KW wound repair; vulnery; injury repair; signal transduction;  
KW motor neurone disease; amyotrophic lateral sclerosis; polymyelitis;  
KW diagnosis; gene therapy; PCR; primer; ss.  
XX

OS Synthetic.  
XX  
PN WO9745143-A1.  
XX  
PD 04-DEC-1997.  
XX  
PF 30-MAY-1997; 97WO-US009407.  
XX  
PR 31-MAY-1996; 96US-0018841P.  
XX  
PA (NAAM-) NAT AMERICAN RED CROSS.  
PA (UYGE-) UNIV GENEVE.  
XX  
PI Zimrin AB, Maciag T, Pepper M, Montesano R, Wong MK;  
XX  
DR WPI; 1998-032340/03.  
XX  
PT New human Jagged protein - used to inhibit or promote angiogenesis and to  
PT control migration of endothelial cells in injured blood vessels.  
XX  
PS Example 3; Page 38; 81pp; English.  
XX

CC This oligo-dT primer was used in the synthesis of cDNA from total RNA  
CC isolated from human umbilical vein endothelial cells (HUVEC) stimulated  
CC with fibrin. It was also used as a 3' primer with a 5' primer (see  
CC AAV03676) in the PCR amplification of the cDNA. The PCR product was  
CC cloned into a TA vector and used to screen a HUVEC cDNA library. RT-PCR  
CC analysis (see AAV03677-84) was performed to analyse expression of Jagged,  
CC Notch 1, Notch 2 and glyceraldehyde 3-phosphate dehydrogenase in human  
CC endothelial cell populations. The novel human Jagged gene (see AAV03684)  
CC and protein (see AAW40827) can be used to control migration of  
CC endothelial cells and in methods of modulating angiogenesis  
XX  
SQ Sequence 22 BP; 2 A; 4 C; 4 G; 12 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.2; DB 1; Length 22;  
Best Local Similarity 83.3%; Pred. No. 5.4e+03;  
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 1978 GAAAAAAGAAAGTGTG 1995  
Db 21 GAAAAAAGAAAGCTTG 4



AC	AAZ47344;	AC	AAZ47344;
XX		XX	
DT	06-MAR-2000 (first entry)	DT	06-MAR-2000 (first entry)
XX		XX	
DE	PCR primer C used in differential display analysis of Aspergillus oryzae.	DE	PCR primer C used in differential display analysis of Aspergillus oryzae.
XX		XX	
KW	Dopa decarboxylase; DDC2; DDC3; increased yield; hormone; receptor;	KW	Dopa decarboxylase; DDC2; DDC3; increased yield; hormone; receptor;
KW	antibody; reporter; enzyme; polypeptide production; primer; ss.	KW	antibody; reporter; enzyme; polypeptide production; primer; ss.
XX		XX	
OS	Synthetic.	OS	Synthetic.
OS	Aspergillus oryzae.	OS	Aspergillus oryzae.
XX		XX	
PN	WO9960136-A1.	PN	WO9960136-A1.
XX		XX	
PD	25-NOV-1999.	PD	25-NOV-1999.
XX		XX	
PF	14-MAY-1999; 99WO-US010689.	PF	14-MAY-1999; 99WO-US010689.
XX		XX	
PR	15-MAY-1998; 98US-00079344.	PR	15-MAY-1998; 98US-00079344.
PR	15-MAY-1998; 98US-00079601.	PR	15-MAY-1998; 98US-00079601.
XX		XX	
PA	(NOVO ) NOVO NORDISK BIOTECH INC.	PA	(NOVO ) NOVO NORDISK BIOTECH INC.
PA	(NOVO ) NOVO-NORDISK AS.	PA	(NOVO ) NOVO-NORDISK AS.
XX		XX	
PI	Wahleithner J, Christensen T;	PI	Wahleithner J, Christensen T;
XX		XX	
DR	WPI; 2000-062459/05.	DR	WPI; 2000-062459/05.
XX		XX	
PT	New isolated Aspergillus oryzae signaling sequences, used to increase the	PT	New isolated Aspergillus oryzae signaling sequences, used to increase the
PT	production of polypeptides by recombinant host filamentous fungal cells.	PT	production of polypeptides by recombinant host filamentous fungal cells.
XX		XX	
PS	Example 2; Page 35; 78pp; English.	PS	Example 2; Page 35; 78pp; English.
XX		XX	
CC	Sequences AAZ47342-247353 are oligo(DT12N2) primers used in the	CC	Sequences AAZ47342-247353 are oligo(DT12N2) primers used in the
CC	differential display analysis of the Aspergillus oryzae strains HC4.01	CC	differential display analysis of the Aspergillus oryzae strains HC4.01
CC	and 27. The strains were analysed to find the genetic basis for phenotype	CC	and 27. The strains were analysed to find the genetic basis for phenotype
CC	differences in the strains which are used in a method for producing a	CC	differences in the strains which are used in a method for producing a
CC	polypeptide in an enhanced amount. The method involves cultivating a	CC	polypeptide in an enhanced amount. The method involves cultivating a
CC	mutant of a parent filamentous fungal cell in suitable nutrient medium.	CC	mutant of a parent filamentous fungal cell in suitable nutrient medium.
CC	The mutant cell contains the nucleotide sequence encoding the polypeptide	CC	The mutant cell contains the nucleotide sequence encoding the polypeptide
CC	to be synthesised and one or more second nucleotide sequences encoding a	CC	to be synthesised and one or more second nucleotide sequences encoding a
CC	DDC polypeptide (see AAZ47338-247339). The mutant cell produces more of	CC	DDC polypeptide (see AAZ47338-247339). The mutant cell produces more of
CC	the polypeptide than the parent cell and the polypeptide can be recovered	CC	the polypeptide than the parent cell and the polypeptide can be recovered
CC	from the nutrient medium of the mutant cell. The method can be used for	CC	from the nutrient medium of the mutant cell. The method can be used for
CC	the production of polypeptides such as hormones, receptors, antibodies,	CC	the production of polypeptides such as hormones, receptors, antibodies,
CC	reporters or enzymes, e.g. an aminopeptidase, amylase, carbohydase,	CC	reporters or enzymes, e.g. an aminopeptidase, amylase, carbohydase,
CC	carboxypeptidase, catalase, cellulase, chitinase, cutinase, cyclodextrin	CC	carboxypeptidase, catalase, cellulase, chitinase, cutinase, cyclodextrin
CC	glycosyltransferase, deoxyribonuclease, esterase, alpha-galactosidase,	CC	glycosyltransferase, deoxyribonuclease, esterase, alpha-galactosidase,
CC	beta-galactosidase, glucoamylase, alpha-glucosidase, beta-glucosidase,	CC	beta-galactosidase, glucoamylase, alpha-glucosidase, beta-glucosidase,
CC	invertase, laccase, lipase, mannosidase, mutanase, oxidase, pectinolytic	CC	invertase, laccase, lipase, mannosidase, mutanase, oxidase, pectinolytic
CC	enzyme, peroxidase, phytase, polyphenoloxidase, proteolytic enzyme,	CC	enzyme, peroxidase, phytase, polyphenoloxidase, proteolytic enzyme,
CC	ribonuclease, transglutaminase or xylanase	CC	ribonuclease, transglutaminase or xylanase
SQ	Sequence 22 BP; 2 A; 4 C; 3 G; 13 T; 0 U; 0 Other;	SQ	Sequence 22 BP; 2 A; 4 C; 4 G; 12 T; 0 U; 0 Other;
	Query Match 0.5%; Score 13.2; DB 1; Length 22;		Query Match 0.5%; Score 13.2; DB 1; Length 22;
	Best Local Similarity 83.3%; Pred. No. 5.4e+03;		Best Local Similarity 83.3%; Pred. No. 5.4e+03;
	Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;		Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY	1978 GAAAAAAGAAAGTGTG 1995	QY	1978 GAAAAAAGAAAGTGTG 1995
Db	21 GAAAAAAGAAAGCTTG 4	Db	21 GAAAAAAGAAAGCTTG 4
RESULT 5273		RESULT 5273	
AAZ47343/c		AAZ47343/c	
ID	AAZ47343 standard; DNA; 22 BP.	ID	AAZ47343 standard; DNA; 22 BP.
XX		XX	
AC	AAZ47343;	AC	AAZ47343;
XX		XX	
DT	06-MAR-2000 (first entry)	DT	06-MAR-2000 (first entry)
XX		XX	
DE	PCR primer B used in differential display analysis of Aspergillus oryzae.	DE	PCR primer B used in differential display analysis of Aspergillus oryzae.

XX KW Dopa decarboxylase; DDC2; DDC3; increased yield; hormone; receptor;  
KW antibody; reporter; enzyme; polypeptide production; primer; ss.  
XX OS Synthetic.  
OS Aspergillus oryzae.  
XX PN WO9960136-A1.  
XX PD 25-NOV-1999.  
XX PF 14-MAY-1999; 99WO-US010689.  
XX PR 15-MAY-1998; 98US-00079344.  
PR 15-MAY-1998; 98US-00079601.  
XX PA (NOVO ) NOVO NORDISK BIOTECH INC.  
PA (NOVO ) NOVO-NORDISK AS.  
XX PI Wahleithner J, Christensen T;  
XX WPI; 2000-062459/05.  
XX New isolated Aspergillus oryzae signaling sequences, used to increase the  
PT production of polypeptides by recombinant host filamentous fungal cells.  
PT  
XX Example 2; Page 35; 78pp; English.  
XX Sequences AAZ47342-Z47353 are oligo(dT12N2) primers used in the  
CC differential display analysis of the Aspergillus oryzae strains HC4.01  
CC and 27. The strains were analysed to find the genetic basis for phenotype  
CC differences in the strains which are used in a method for producing a  
CC polypeptide in an enhanced amount. The method involves cultivating a  
CC mutant of a parent filamentous fungal cell in suitable nutrient medium.  
CC The mutant cell contains the nucleotide sequence encoding the polypeptide  
CC to be synthesised and one or more second nucleotide sequences encoding a  
CC DDC polypeptide (see AAZ47338-Z47339). The mutant cell produces more of  
CC the polypeptide than the parent cell and the polypeptide can be recovered  
CC from the nutrient medium of the mutant cell. The method can be used for  
CC the production of polypeptides such as hormones, receptors, antibodies,  
CC reporters or enzymes, e.g. an aminopeptidase, amylase, carbohydrazase,  
CC carboxypeptidase, catalase, cellulase, chitinase, cutinase, cyclodextrin  
CC glycosyltransferase, deoxyribonuclease, esterase, alpha-galactosidase,  
CC beta-galactosidase, glucoamylase, alpha-glucosidase, beta-glucosidase,  
CC invertase, laccase, lipase, mannosidase, mutanase, oxidase, pectinolytic  
CC enzyme, peroxidase, phytase, polyphenoloxidase, proteolytic enzyme,  
CC ribonuclease, transglutaminase or xylanase  
XX  
SQ Sequence 22 BP; 2 A; 5 C; 3 G; 12 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.2; DB 1; Length 22;  
Best Local Similarity 83.3%; Pred. No. 5.4e+03;  
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 1978 GAAAAAAAGAAAAGTGTG 1995  
Db 21 GAAAAAAAGAAAAGCTTG 4  
RESULT 5274  
AAH22185/c  
ID AAH22185 standard; DNA; 22 BP.  
XX  
AC AAH22185;  
XX 20-AUG-2001 (first entry)  
DT Human hepatocyte auxin related 3'-(T-rich) primer A.  
XX Human; hepatocyte; auxin; liver; hepatitis; chronic hepatitis;  
KW liver fibrosis; cirrhosis; liver damage; primer; ss.  
XX OS Homo sapiens.

XX CN1280985-A.  
XX 24-JAN-2001.  
XX 20-JUL-1999; 99CN-00110801.  
XX 20-JUL-1999; 99CN-00110801.  
PR (HOSP-) HOSPITAL NO 458 CHINESE PLA.  
XX Kong X, Yi X, Zeng P;  
DR WPI; 2001-291394/31.  
XX Novel recombinant human hepatocyte auxin, its preparation and clinical  
PT application.  
PT  
XX Example 1; Page 2 (disclosure); 13pp; Chinese.  
XX The present invention describes a differential indication PCR (polymerase  
CC chain reaction) technique which is used to obtain a new complete gene  
CC able to promote the repair of damaged liver cells and with substance  
CC total length of 0.7 kb by screening the cDNA library of human foetal  
CC liver. The induction expression of engineering bacteria, the separation  
CC and cracking of inclusion body and the process for restoring and  
CC decontaminating proteins are built up to obtain high purity recombinant  
CC human hepatocyte auxin. It can externally promote the reproduction of  
CC primary culture liver cells and liver cancer cells BEL-7402 and  
CC internally promote the synthesis of mouse liver cell DNA after CCL4 is  
CC damaged and the repair of liver cells. The method may be used to treat  
CC serious hepatitis, chronic hepatitis, liver fibrosis and cirrhosis. The  
CC present sequence represents a primer which is used in the exemplification  
CC of the present invention  
XX  
SQ Sequence 22 BP; 2 A; 4 C; 3 G; 13 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.2; DB 1; Length 22;  
Best Local Similarity 83.3%; Pred. No. 5.4e+03;  
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 1978 GAAAAAAAGAAAAGTGTG 1995  
Db 21 GAAAAAAAGAAAAGCTTG 4  
RESULT 5275  
AAH22187/c  
ID AAH22187 standard; DNA; 22 BP.  
XX  
AC AAH22187;  
XX 20-AUG-2001 (first entry)  
DT Human hepatocyte auxin related 3'-(T-rich) primer C.  
XX Human; hepatocyte; auxin; liver; hepatitis; chronic hepatitis;  
KW liver fibrosis; cirrhosis; liver damage; primer; ss.  
XX OS Homo sapiens.  
XX CN1280985-A.  
XX 24-JAN-2001.  
XX 20-JUL-1999; 99CN-00110801.  
XX 20-JUL-1999; 99CN-00110801.  
PR (HOSP-) HOSPITAL NO 458 CHINESE PLA.  
XX Kong X, Yi X, Zeng P;  
PI

DR WPI; 2001-291394/31.

XX Novel recombinant human hepatocyte auxin, its preparation and clinical

PT application.

PT

XX Example 1; Page 2 (disclosure); 13pp; Chinese.

PS

XX The present invention describes a differential indication PCR (polymerase

CC chain reaction) technique which is used to obtain a new complete gene

CC able to promote the repair of damaged liver cells and with substance

CC total length of 0.7 kb by screening the cDNA library of human foetal

CC liver. The induction expression of engineering bacteria, the separation

CC and cracking of inclusion body and the process for restoring and

CC decontaminating proteins are built up to obtain high purity recombinant

CC human hepatocyte auxin. It can externally promote the reproduction of

CC primary culture liver cells and liver cancer cells BEL-7402 and

CC internally promote the synthesis of mouse liver cell DNA after CCL4 is

CC damaged and the repair of liver cells. The method may be used to treat

CC serious hepatitis, chronic hepatitis, liver fibrosis and cirrhosis. The

CC present sequence represents a primer which is used in the exemplification

CC of the present invention

XX

SQ Sequence 22 BP; 2 A; 4 C; 4 G; 12 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.2; DB 1; Length 22;

Best Local Similarity 83.3%; Pred. No. 5.4e+03;

Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1978 GAAAAAAAGAAAAGTGTG 1995

Db 21 GAAAAAAAGAAAAGCTTG 4

RESULT 5276

AAH22186/c

ID AAH22186 standard; DNA; 22 BP.

XX

AC AAH22186;

XX

XX 20-AUG-2001 (first entry)

DT

XX Human hepatocyte auxin related 3'-(T-rich) primer B.

DE

XX Human; hepatocyte; auxin; liver; hepatitis; chronic hepatitis;

KW liver fibrosis; cirrhosis; liver damage; primer; ss.

KW

XX Homo sapiens.

OS

XX CN1280985-A.

PN

XX 24-JAN-2001.

PD

XX 20-JUL-1999; 99CN-00110801.

PF

XX 20-JUL-1999; 99CN-00110801.

PR

XX (HOSP-) HOSPITAL NO 458 CHINESE PLA.

XX

PA Kong X, Yi X, Zeng P;

XX

PI WPI; 2001-291394/31.

XX

DR Novel recombinant human hepatocyte auxin, its preparation and clinical

XX application.

PT

XX Example 1; Page 2 (disclosure); 13pp; Chinese.

PS

XX The present invention describes a differential indication PCR (polymerase

CC chain reaction) technique which is used to obtain a new complete gene

CC able to promote the repair of damaged liver cells and with substance

CC total length of 0.7 kb by screening the cDNA library of human foetal

CC liver. The induction expression of engineering bacteria, the separation

CC and cracking of inclusion body and the process for restoring and

CC decontaminating proteins are built up to obtain high purity recombinant

CC human hepatocyte auxin. It can externally promote the reproduction of

CC primary culture liver cells and liver cancer cells BEL-7402 and

CC internally promote the synthesis of mouse liver cell DNA after CCL4 is

CC damaged and the repair of liver cells. The method may be used to treat

CC serious hepatitis, chronic hepatitis, liver fibrosis and cirrhosis. The

CC present sequence represents a primer which is used in the exemplification

CC of the present invention

XX

SQ Sequence 22 BP; 2 A; 5 C; 3 G; 12 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.2; DB 1; Length 22;

Best Local Similarity 83.3%; Pred. No. 5.4e+03;

Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1978 GAAAAAAAGAAAAGTGTG 1995

Db 21 GAAAAAAAGAAAAGCTTG 4

RESULT 5277

AAT93818/c

ID AAT93818 standard; DNA; 22 BP.

XX

AC AAT93818;

XX

XX 25-MAR-2003 (revised)

DT 24-FEB-1998 (first entry)

DT

XX Antitumoural phosphodiester oligonucleotide 8 with cytotoxic activity.

DE

XX Phosphodiester; selective binding; cell viability; growth;

KW tumoural cell line; cytotoxic activity; tumour cell; lymphoma;

KW lymphoblastic tumour; ss.

KW

XX Synthetic.

OS

XX

XX Key modified\_base Location/Qualifiers

FT 1..22

FT /\*tag= a

FT /note= "phosphodiester oligonucleotide"

XX

XX WO9720924-A1.

PN

XX 12-JUN-1997.

PD

XX 04-DEC-1996; 96WO-EP005388.

PF

XX 04-DEC-1995; 95IT-MI002539.

PR

XX (SAIC-) SAICOM SRL.

PA

XX Scaggiante B, Quadrifoglio F;

PI WPI; 1997-319771/29.

XX

DR New phosphodiesteric oligonucleotide(s) - which exert a specific and

XX selective cytotoxic effect on tumour cells, for treating both solid and

PT liquid tumours.

PT

XX Claim 10; Page 5; 38pp; English.

PS

XX Novel phosphodiesteric oligonucleotides AAT93811-27 are based on the

CC generic formula, in the 3'-5' or 5'-3' direction: (GaTa')a'-(GbTb')b'-'

CC (GcTc')c'-(GdTr')d'-(GeTe')e'-(GfTf')f'-(GgTg')g'-'N', where: N and

CC N' = T or G, equal or different from each other; x = 0-8, equal or

CC different from each other; a, b, c, d, e, f, and g = 0-10, equal or

CC different from each other; a', b', c', d', e', f', and g' = 0-30, equal

CC or different from each other; a'', b'', c'', d'', e'', f'', and g'' = 1-

CC 16, equal or different from each other; The oligonucleotides are believed

CC to selectively bind and sequester some proteins which are essential to

CC the viability and growth of tumoural cell line. They have specific and

CC selective cytotoxic activity against tumour cells, and can be used for

CC treating tumours of the liquid type, in particular of lymphoblastic  
CC origin, and of solid type, in particular lymphomas. The present  
CC phosphodiester oligonucleotide, at a concentration of 15 micromolar,  
CC reduced growth of CCRF-CEM tumoural cells by 79%, which is detectable 48  
CC hours after administration. (Updated on 25-MAR-2003 to correct PR field.)  
XX  
SQ Sequence 22 BP; 0 A; 0 C; 4 G; 18 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.2; DB 1; Length 22;  
Best Local Similarity 83.3%; Pred. No. 5.4e+03;  
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2786 AAAAAAAAAAAAAAAAAA 2803  
|||||  
Db 22 AAAAAAAAAAAAAAAAAA 5

RESULT 5278  
AAF60331/c  
ID AAF60331 standard; DNA; 23 BP.

XX  
AC AAF60331;

XX  
DT 10-MAY-2001 (first entry)

XX  
DE Human liver RNA reverse transcription primer.

XX  
KW Human; endostatin; antitumour; cytostatic; antiarthritic; antipsoriatic;  
KW antidiabetic; ophthalmological; gene therapy; angiogenic inhibitor;  
KW adenoviral vector; diabetic retinopathy; cardiovascular disease;  
KW arthritis; psoriasis; cerebral oedema; intravascular coagulopathy;  
KW lymphoma; leukaemia; primer; ss.

XX  
OS Homo sapiens.

XX  
PN WO200112830-A1.

XX  
PD 22-FEB-2001.

XX  
PF 11-AUG-2000; 2000WO-EP007865.

XX  
PR 13-AUG-1999; 99US-00373938.

XX  
PA (NOVS ) NOVARTIS AG.

XX  
PA (NOVS ) NOVARTIS-ERFINDUNGEN VERW GES MBH.

XX  
PI Hallenbeck PL, Chen CT;

XX  
DR WPI; 2001-202871/20.

XX  
PT Adenoviral vector for treating tumors and disorders associated with  
PT angiogenesis, such as cancer, arthritis, and psoriasis, comprises a DNA  
PT sequence encoding an angiogenic inhibitor, particularly endostatin.

XX  
PS Example 4; Page 31; 59pp; English.

XX  
CC The present sequence was used in the construction of an adenoviral vector  
CC which includes a DNA sequence encoding endostatin. The adenoviral vector  
CC is useful for expressing endostatin in a mammalian cell such as an A549  
CC or Hep3B cell. It is useful for treating other diseases and disorders  
CC associated with angiogenesis, such as neovascular diseases of the eye,  
CC including diabetic retinopathy, cardiovascular disease, arthritis,  
CC psoriasis, cerebral oedema and intravascular coagulopathy (Kasabach-  
CC Merritt syndrome). The vector inhibits, prevents or destroys the growth  
CC of tumours by preventing the formation of blood vessels in tumours, such  
CC as lymphoma and leukaemia

XX  
SQ Sequence 23 BP; 5 A; 2 C; 4 G; 12 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.2; DB 1; Length 23;  
Best Local Similarity 83.3%; Pred. No. 5.5e+03;  
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1970 TTACCTTGAAAAAAGA 1987  
|||||  
Db 18 TTACACTGAAAAAAGA 1

RESULT 5279  
ABQ81205/c

ID ABQ81205 standard; DNA; 23 BP.

XX  
AC ABQ81205;

XX  
DT 05-DEC-2002 (first entry)

XX  
DE Human endostatin cDNA primer.

XX  
KW Endostatin; human; ophthalmological; ocular neovascularisation;  
KW choroidal neovascularisation; gene therapy; adenovirus; vector; primer;  
KW ss.

XX  
OS Homo sapiens.

XX  
PN WO200267971-A2.

XX  
PD 06-SEP-2002.

XX  
PF 21-FEB-2002; 2002WO-US005336.

XX  
PR 22-FEB-2001; 2001US-0270787P.

XX  
PR 04-APR-2001; 2001US-0281296P.

XX  
PA (NOVS ) NOVARTIS AG.

XX  
PI Brazzell RK, Campochiaro PA, Dixon KH;

XX  
DR WPI; 2002-698636/75.

XX  
PT Treating or preventing choroidal neovascularization comprises increasing  
PT the amount of endostatin in ocular tissues of afflicted individuals to a  
PT choroidal neovascularization inhibiting level.

XX  
PS Example 6; Page 27; 44pp; English.

XX  
CC The present sequence is a primer that was used in the reverse  
CC transcription of human endostatin mRNA. The resulting cDNA was subjected  
CC to PCR amplification and used to generate a recombinant adenoviral vector  
CC encoding human endostatin. A claimed method for the treatment of ocular,  
CC especially choroidal, neovascularisation involves increasing the level of  
CC endostatin, especially human endostatin (see ABB79901) in ocular tissue.  
CC The increase is effected by administering a viral vector, especially an  
CC adenovirus, adeno-associated virus, a retrovirus or lentivirus vector,  
CC comprising an endostatin-encoding nucleic acid. Cells secreting  
CC endostatin may be encapsulated and implanted within an individual

XX  
SQ Sequence 23 BP; 5 A; 2 C; 4 G; 12 T; 0 U; 0 Other;

Query Match 0.5%; Score 13.2; DB 1; Length 23;  
Best Local Similarity 83.3%; Pred. No. 5.5e+03;  
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1970 TTACCTTGAAAAAAGA 1987  
|||||  
Db 18 TTACACTGAAAAAAGA 1

RESULT 5280  
AAA53817

ID AAA53817 standard; DNA; 23 BP.

XX  
AC AAA53817;

XX  
DT 04-DEC-2000 (first entry)

XX  
DE Primer BTU1-75 hybridizing to BTU1 gene 5' flanking region.



XX BTU1; beta-tubulin; protein expression system; negative selection;  
KW paclitaxel sensitivity; cell surface; antigen; protozoa; ciliate;  
KW live vaccine; Ichthyophthius multifiliis; immobilization-antigen;  
KW i-antigen; freshwater; fish; protozoacide; primer; ss.  
XX  
OS Tetrahymena thermophila.  
XX  
PN WO200046381-A1.  
XX  
XX 10-AUG-2000.  
XX  
PF 04-FEB-2000; 2000WO-US002966.  
XX  
PR 04-FEB-1999; 99US-0118634P.  
PR 02-MAR-1999; 99US-0122372P.  
PR 17-MAR-1999; 99US-0124905P.  
PR 27-APR-1999; 99US-0131121P.  
XX  
PA (UYGE-) UNIV GEORGIA RES FOUND INC.  
PA (GAER/) GAERTIG J.  
PA (DICK/) DICKERSON H W.  
PA (CLAR/) CLARK T G.  
XX  
PI Gaertig J, Dickerson HW, Clark TG;  
XX  
XX WPI; 2000-514962/46.  
XX  
PT Recombinant expression systems for expressing heterologous nucleic acids  
PT and producing recombinant protein, comprises nonpathogenic protozoa such  
PT as Tetrahymena resistant to paclitaxel.  
XX  
PS Example 2; Page 36; 83pp; English.  
XX  
CC Primers AAA53817-18 were used to amplify genomic DNA from T. thermophila  
CC transformants to identify sequences integrated into the BTU1 locus.  
CC Tetrahymena thermophila expresses two major beta-tubulin genes (BTU1 and  
CC BTU2), which encode identical beta-tubulin proteins. Either of these two  
CC genes (but not both at once) can be disrupted without a detectable change  
CC in the cell phenotype. A K350L substitution in the BTU1 beta-tubulin  
CC protein confers increased resistance to microtubule-depolymerizing drugs  
CC and increased sensitivity to paclitaxel, a microtubule-stabilizing drug.  
CC Cells carrying the Btul-1K350M allele can be transformed to paclitaxel  
CC resistance by gene replacement of Btul-1K350M with a wild-type BTU1 gene  
CC fragment, eliminating the need to incorporate a means for positive  
CC selection. Where the host organism is not a T. thermophila mutant  
CC containing the Btul-1K350M allele, BTU1::neol construct, which  
CC substitutes the coding region of the neol gene (conferring resistance to  
CC paromycin) for that of BTU1, can be used to generate BTU1 gene knockouts  
CC and for positive selection. Heterologous nucleic acids (especially  
CC encoding antigenic polypeptides) can be inserted into a BTU gene for  
CC successful cell-surface expression that is maintained by way of negative  
CC selection. Preferred expression vectors disrupt the Btul-1K350M gene by  
CC homologous recombination-mediated insertion of a heterologous nucleic  
CC acid, thereby restoring resistance to paclitaxel in the resulting  
CC transgenic host. Transgenic ciliated protozoa are useful as live vaccines  
CC for stimulating an immune response in a vertebrate. The transgenic  
CC protozoan host cells are also useful for producing polyclonal antibodies  
CC (claimed). In particular, Tetrahymena expressing Ichthyophthius  
CC multifiliis immobilization-antigen (i-antigen) protein on their surface  
CC are effective vehicles for vaccination of freshwater fish against  
CC infection by I. multifiliis  
XX  
SQ Sequence 23 BP; 17 A; 0 C; 2 G; 4 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.2; DB 1; Length 23;  
Best Local Similarity 83.3%; Pred. No. 5.5e+03;  
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 1980 AAAAAAGAAAAGTGTGTA 1997  
Db 1 AAAAAATAAAAGTTGAA 18

RESULT 5281  
ABZ25620/c  
ID ABZ25620 standard; DNA; 24 BP.  
XX  
AC ABZ25620;  
XX  
XX 28-MAR-2003 (first entry)  
XX  
DE Human zinc finger protein 11 PCR primer 1.  
XX  
KW Human; zinc finger protein 11; tumour; haemopathy; HIV; inflammation;  
KW immunological disease; zinc finger; PCR; primer; ss.  
XX  
OS Homo sapiens.  
XX  
PN CN1364768-A.  
XX  
PD 21-AUG-2002.  
XX  
XX 10-JAN-2001; 2001CN-00105125.  
XX  
PR 10-JAN-2001; 2001CN-00105125.  
XX  
PA (BIOW-) BIOWINDOW GENE DEV INC SHANGHAI.  
XX  
XX Mao Y; Xie Y;  
PI  
XX WPI; 2003-000480/01.  
DR  
XX New human zinc finger protein 11 and encoding polynucleotide, useful in  
PT treating cancer and as an anti-inflammatory.  
PT  
XX Example 2; Page 16 (Disclosure); 32pp; Chinese.  
PS  
XX The invention relates to the novel human zinc finger protein 11, and the  
CC polynucleotide encoding it. The polypeptide is useful in treating various  
CC diseases, such as malignant tumours, haemopathy, HIV infection,  
CC immunological diseases and various inflammations. The present sequence  
CC represents a PCR primer used to amplify the human zinc finger protein 11  
CC cDNA of the invention  
XX  
SQ Sequence 24 BP; 4 A; 5 C; 0 G; 15 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13.2; DB 1; Length 24;  
Best Local Similarity 83.3%; Pred. No. 5.5e+03;  
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 1978 GAAAAAAGAAAAGTGTG 1995  
Db 18 GTAAAAAAGAAAAGTG 1  
RESULT 5282  
ABN86391/c  
ID ABN86391 standard; DNA; 24 BP.  
XX  
AC ABN86391;  
XX  
DT 21-OCT-2002 (first entry)  
XX  
DE Basophilic nucleoprotein polypeptide 45.32 cDNA isolating primer 2.  
XX  
KW Basophilic nucleoprotein polypeptide 45.32; cytostatic; human; RT-PCR;  
KW embryonic development; growth; tumour; immunological disease; primer; ss.  
XX  
OS Homo sapiens.  
XX  
PN CN1341659-A.  
XX  
PD 27-MAR-2002.  
XX  
PF 07-SEP-2000; 2000CN-00125081.

XX 07-SEP-2000; 2000CN-00125081.  
XX (SHAN-) SHANGHAI BIODOOR GENE DEV CO LTD.  
XX Mao Y, Xie Y;  
XX WPI; 2002-520726/56.  
DR A human basophilic nucleoprotein polypeptide 45.32, useful for curing  
XX e.g. tumors and immunological disease.  
PS Example 2; Page 16 (disclosure); 33pp; Chinese.  
XX  
CC The invention relates to a human basophilic nucleoprotein polypeptide  
CC 45.32 and encoding polynucleotide. The polypeptide can be expressed by  
CC standard DNA recombination technology. The polypeptide is useful for  
CC curing several diseases, such as embryonic development disturbance,  
CC growth development disturbance disease, tumour and immunological disease.  
CC The present sequence represents a RT-PCR primer for isolating the human  
CC basophilic nucleoprotein polypeptide 45.32 cDNA  
XX  
SQ Sequence 24 BP; 6 A; 1 C; 0 G; 17 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.2; DB 1; Length 24;  
Best Local Similarity 83.3%; Pred. No. 5.5e+03;  
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
  
QY 2786 AAAAAAAAAAAAAAAAAA 2803  
Db ||||| ||||| |||||  
20 AAAAAATAAAAAATATAA 3  
  
RESULT 5283  
ABQ94378/c  
ID ABQ94378 standard; DNA; 25 BP.  
XX  
AC ABQ94378;  
XX  
DT 28-OCT-2002 (first entry)  
XX  
DE Tumour suppression-related oligonucleotide #29.  
XX  
KW Tumour; cytostatic; antiviral; neuroprotective; nootropic; neuroleptic;  
KW tumour suppression; tumour reversion; apoptosis; viral resistance; human;  
KW viral infection; cell degeneration disease; neurodegeneration; ds;  
KW Alzheimer's disease; schizophrenia; immune disease; inflammatory disease.  
XX  
OS Homo sapiens.  
XX  
PN FR2819824-A1.  
XX  
PD 26-JUL-2002.  
XX  
PF 23-JAN-2001; 2001FR-00000899.  
XX  
PR 23-JAN-2001; 2001FR-00000899.  
XX  
PA (MOLE-) MOLECULAR ENGINES LAB SA.  
XX  
PI Telerman A, Amson R, Tuijnder M, Susini L;  
XX  
DR WPI; 2002-610803/66.  
XX  
PT New nucleic acid implicated e.g. in tumor suppression, useful for  
PT diagnosis of tumors, viral infection and cellular degeneration and for  
PT drug screening.  
XX  
PS Claim 1; Page 46; 623pp; French.  
XX  
CC The present invention relates to novel human nucleic acid sequences (I).  
CC The present sequence is one such nucleic acid sequence. Expression of (I)  
are implicated in tumour suppression or reversion and apoptosis and viral  
diagnosis of tumors, viral infection and cellular degeneration and for  
drug screening.  
XX  
PS Claim 1; Page 46; 623pp; French.  
XX  
CC The present invention relates to novel human nucleic acid sequences (I).  
CC The present sequence is one such nucleic acid sequence. Expression of (I)  
are implicated in tumour suppression or reversion and apoptosis and viral

CC resistance. (I) are useful as probes or primers for detecting,  
CC identifying, measuring and/or amplifying nucleic acid sequences, as  
CC antisense reagents and for recombinant production of polypeptides. (I),  
CC polypeptides (II) encoded by (I), vector containing (I), cells containing  
CC these vectors and antibodies (Ab) against (II) are all useful for  
CC treatment/prevention of viral, tumour and cell degeneration diseases  
CC (especially neurodegeneration, such as Alzheimer's disease and  
CC schizophrenia). Analysing the expression of (I) is also useful for  
CC diagnosis and/or prognosis of such diseases. Transgenic animals carrying  
CC (I) are used for studying the aetiology of these diseases (also immune  
CC and inflammatory diseases). Note: In the present specification, SEQ ID 1  
CC to 2280 are claimed in Claim 1, however only SEQ ID 1 to 2270 are shown  
CC in the specification  
XX  
SQ Sequence 25 BP; 13 A; 3 C; 3 G; 6 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13.2; DB 1; Length 25;  
Best Local Similarity 83.3%; Pred. No. 5.5e+03;  
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
  
QY 2176 TTTT TTTT TTTT TTTT TTTT TTTT G 2193  
Db ||||| ||||| ||||| |||||  
25 TTTT TTTT TTTT TTTT TTTT TTTT GACAATG 8  
  
RESULT 5284  
ABQ94374/c  
ID ABQ94374 standard; DNA; 25 BP.  
XX  
AC ABQ94374;  
XX  
DT 28-OCT-2002 (first entry)  
XX  
DE Tumour suppression-related oligonucleotide #25.  
XX  
KW Tumour; cytostatic; antiviral; neuroprotective; nootropic; neuroleptic;  
KW tumour suppression; tumour reversion; apoptosis; viral resistance; human;  
KW viral infection; cell degeneration disease; neurodegeneration; ds;  
KW Alzheimer's disease; schizophrenia; immune disease; inflammatory disease.  
XX  
OS Homo sapiens.  
XX  
PN FR2819824-A1.  
XX  
PD 26-JUL-2002.  
XX  
PF 23-JAN-2001; 2001FR-00000899.  
XX  
PR 23-JAN-2001; 2001FR-00000899.  
XX  
PA (MOLE-) MOLECULAR ENGINES LAB SA.  
XX  
PI Telerman A, Amson R, Tuijnder M, Susini L;  
XX  
DR WPI; 2002-610803/66.  
XX  
PT New nucleic acid implicated e.g. in tumor suppression, useful for  
PT diagnosis of tumors, viral infection and cellular degeneration and for  
PT drug screening.  
XX  
PS Claim 1; Page 46; 623pp; French.  
XX  
CC The present invention relates to novel human nucleic acid sequences (I).  
CC The present sequence is one such nucleic acid sequence. Expression of (I)  
are implicated in tumour suppression or reversion and apoptosis and viral  
resistance. (I) are useful as probes or primers for detecting,  
CC identifying, measuring and/or amplifying nucleic acid sequences, as  
CC antisense reagents and for recombinant production of polypeptides. (I),  
CC polypeptides (II) encoded by (I), vector containing (I), cells containing  
CC these vectors and antibodies (Ab) against (II) are all useful for  
CC treatment/prevention of viral, tumour and cell degeneration diseases  
CC (especially neurodegeneration, such as Alzheimer's disease and  
CC schizophrenia). Analysing the expression of (I) is also useful for







KW cDNA tag; identification; gene expression analysis; linker;  
KW expressed gene identification; EGI; ss.

XX Synthetic.

XX WO200274951-A1.

XX PD 26-SEP-2002.

XX PF 13-MAR-2002; 2002WO-JP002338.

XX PR 15-MAR-2001; 2001JP-00073959.

XX PA (KURE ) KUREHA CHEM IND CO LTD.

PA (YAMA/) YAMAMOTO M.

PA (YAMA/) YAMAMOTO N.

XX Yamamoto M, Yamamoto N, Hirose K, Kasai J;

XX WPI; 2002-759896/82.

XX Construction of cDNA tags for identifying expressed genes with specific  
PT linkers and recognition sequences, applicable in gene expression  
PT analysis, disease diagnosis and identifying target for gene therapy.

XX Example 1; Page 24; 59pp; Japanese.

XX The present invention describes a method for constructing a cDNA tag for  
CC identifying an expressed gene. The method comprises: (a) preparation of  
CC complementary deoxyribonucleic acid; (b) producing cDNA fragment by  
CC cleavage with II type restriction enzyme; (c) obtaining a linker X-cDNA  
CC fragment ligated material; (d) amplification of the linker X-cDNA tag-  
CC linker Y ligated material; and (e) cleaving the amplification product.  
CC The method can be used for the construction of cDNA tags for identifying  
CC expressed genes, which is applicable in gene expression analysis, disease  
CC diagnosis and identifying target for gene therapy, including the  
CC clarification of difference in function or morphology of cells under  
CC physiological or pathological conditions. The cDNA or cells for assay can  
CC be specifically expressed, with reproducibility and accuracy in the  
CC detection of genes. The present sequence represents an expressed gene  
CC identification (EGI) cDNA tag related oligonucleotide which is used in an  
CC example from the present invention

XX Sequence 14 BP; 1 A; 0 C; 0 G; 13 T; 0 U; 0 Other;

Query Match 0.5%; Score 13; DB 1; Length 14;  
Best Local Similarity 100.0%; Pred. No. 2.9e+03;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2786 AAAAAAAAAAAAAA 2798

Db 13 AAAAAAAAAAAAAA 1

RESULT 5290

ABQ83271

ID ABQ83271 standard; DNA; 14 BP.

XX AC ABQ83271;

XX DT 18-JAN-2003 (first entry)

XX EGI cDNA tag related oligonucleotide SEQ ID NO:44.

XX cDNA tag; identification; gene expression analysis; linker;  
KW expressed gene identification; EGI; ss.

XX Synthetic.

XX WO200274951-A1.

XX PD 26-SEP-2002.

PF 13-MAR-2002; 2002WO-JP002338.

XX PR 15-MAR-2001; 2001JP-00073959.

XX PA (KURE ) KUREHA CHEM IND CO LTD.

PA (YAMA/) YAMAMOTO M.

PA (YAMA/) YAMAMOTO N.

XX Yamamoto M, Yamamoto N, Hirose K, Kasai J;

XX WPI; 2002-759896/82.

XX Construction of cDNA tags for identifying expressed genes with specific  
PT linkers and recognition sequences, applicable in gene expression  
PT analysis, disease diagnosis and identifying target for gene therapy.

XX Example 1; Page 24; 59pp; Japanese.

XX The present invention describes a method for constructing a cDNA tag for  
CC identifying an expressed gene. The method comprises: (a) preparation of  
CC complementary deoxyribonucleic acid; (b) producing cDNA fragment by  
CC cleavage with II type restriction enzyme; (c) obtaining a linker X-cDNA  
CC fragment ligated material; (d) amplification of the linker X-cDNA tag-  
CC linker Y ligated material; and (e) cleaving the amplification product.  
CC The method can be used for the construction of cDNA tags for identifying  
CC expressed genes, which is applicable in gene expression analysis, disease  
CC diagnosis and identifying target for gene therapy, including the  
CC clarification of difference in function or morphology of cells under  
CC physiological or pathological conditions. The cDNA or cells for assay can  
CC be specifically expressed, with reproducibility and accuracy in the  
CC detection of genes. The present sequence represents an expressed gene  
CC identification (EGI) cDNA tag related oligonucleotide which is used in an  
CC example from the present invention

XX Sequence 14 BP; 13 A; 0 C; 1 G; 0 T; 0 U; 0 Other;

Query Match 0.5%; Score 13; DB 1; Length 14;  
Best Local Similarity 100.0%; Pred. No. 2.9e+03;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2786 AAAAAAAAAAAAAA 2798

Db 1 AAAAAAAAAAAAAA 13

RESULT 5291

ABX79769

ID ABX79769 standard; cDNA; 14 BP.

XX AC ABX79769;

XX DT 17-APR-2003 (first entry)

XX EST polymorphic DNA repeat polynucleotide #94.

XX EST; expressed sequence tag; ss; polymorphic repeat; tandem repeat;  
KW polymorphic marker prediction of ubiquitous simple sequences; POMPOUS;  
KW Rep-X; human; genetic disease; drug-treatment; Machado-Joseph;  
KW Haw River syndrome; Huntington's disease; fragile-X syndrome;  
KW Fredreich's ataxia; myotonic dystrophy; hyperandrogenaemia;  
KW spinal atrophy; bulbar atrophy; spinocerebellar ataxia.

XX Homo sapiens.

XX US6472154-B1.

XX PD 29-OCT-2002.

XX PF 31-DEC-1999; 99US-00475947.

XX PR 31-DEC-1999; 99US-00475947.

XX (TEXA ) UNIV TEXAS SYSTEM.

XX Garner HR, Wren JD, Minna JD, Fondon JW;  
XX WPI; 2003-208818/20.  
XX  
XX Identifying a candidate polymorphic repeat within a coding sequence, for  
XX understanding or treating genetic disease, comprises detecting tandem  
XX repeats in a target coding sequence and scoring the repeats for  
XX polymorphic probability.  
XX  
XX Example; Col 343; 588pp; English.  
XX  
XX The invention discloses a method for identifying a candidate polymorphic  
XX repeat within a coding sequence (expressed sequence tag, EST), which  
XX comprises detecting tandem repeats in a target coding sequence, scoring  
XX the repeats for polymorphic probability and generating a dataset  
XX correlating the repeats with polymorphic probability to identify a  
XX candidate polymorphic repeat. The computational methods (polymorphic  
XX marker prediction of ubiquitous simple sequences, POMPOUS, and Rep-X) are  
XX useful for identifying and detecting candidate polymorphic repeats in  
XX human genes, which can be used to understand, treat or eliminate genetic  
XX diseases, predispositions or adverse drug-treatment reactions. Examples  
XX of diseases linked to nucleotide repeats are Machado-Joseph, Haw River  
XX syndrome, Huntington's disease, fragile-X syndrome, Friedrich's ataxia,  
XX myotonic dystrophy, hyperandrogenaemia, spinal and bulbar atrophy and  
XX spinocerebellar ataxia. The sequences presented in ABX79676-ABX80022 are  
XX the polymorphic repeats identified for a search of human ESTs  
XX  
XX Sequence 14 BP; 0 A; 1 C; 0 G; 13 T; 0 U; 0 Other;  
XX  
XX Query Match 0.5%; Score 13; DB 1; Length 14;  
XX Best Local Similarity 100.0%; Pred. No. 2.9e+03;  
XX Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
XX  
XX QY 2166 TTTT TTTT TTTT TTTT 2178  
XX | | | | | | | | | | | | | | | |  
XX 1 TTTT TTTT TTTT TTTT 13  
XX  
XX RESULT 5292  
XX AAX18361  
XX ID AAX18361 standard; DNA; 15 BP.  
XX  
XX AC AAX18361;  
XX  
XX DT 11-MAY-1999 (first entry)  
XX  
XX DE RT-PCR primer of the invention SEQ ID 2.  
XX  
XX KW RT-PCR primer; DNA sequence determination; gene sequence analysis; ss.  
XX  
XX OS Synthetic.  
XX  
XX PN JP11032765-A.  
XX  
XX PD 09-FEB-1999.  
XX  
XX PF 18-JUL-1997; 97JP-00208312.  
XX  
XX PR 18-JUL-1997; 97JP-00208312.  
XX  
XX PA (TAKI ) TAKARA SHUZO CO LTD.  
XX  
XX DR WPI; 1999-183822/16.  
XX  
XX PT Peptides having at least two new nucleotides - useful as primers in RT-  
XX PCR.  
XX  
XX PS Disclosure; Page 10; 19pp; Japanese.  
XX  
XX CC This sequence represents a primer of the invention. The invention relates  
XX to sequences of at least two nucleotides of formula: (X)m5'-(alpha)n-beta  
XX -N3'; or (X)m5'-(gamma)k-delta-N3'; where X = a labelled compound and/or

CC a nucleotide with voluntary sequence; m = 0 or 1; alpha = thymine; n =  
CC natural number indicating the repetition of alpha; beta = V or N;  
CC V = adenine, guanine or cytosine; N = adenine, guanine, cytosine or  
CC thymine; gamma = thymine; k = natural number of 3 or over indicating the  
CC repetition of gamma, in which thymine expressed by gamma is composed of  
CC 1/3 or less of adenine, guanine and/or cytosine. The new nucleotides are  
CC useful as primers for RT-PCR and determination of base sequences. The new  
CC sequences allow for reproductive and highly efficient analysis of gene  
CC sequences  
XX  
XX Sequence 15 BP; 0 A; 2 C; 0 G; 13 T; 0 U; 0 Other;  
XX  
XX Query Match 0.5%; Score 13; DB 1; Length 15;  
XX Best Local Similarity 100.0%; Pred. No. 3.3e+03;  
XX Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
XX  
XX QY 2166 TTTT TTTT TTTT TTTT 2178  
XX | | | | | | | | | | | | | | | |  
XX 1 TTTT TTTT TTTT TTTT 13  
XX  
XX Db  
XX  
XX RESULT 5293  
XX AAX69797/C  
XX ID AAX69797 standard; RNA; 17 BP.  
XX  
XX AC AAX69797;  
XX  
XX DT 28-JUL-1999 (first entry)  
XX  
XX DE Human flt1 VEGF receptor hammerhead ribozyme substrate #1092.  
XX  
XX KW Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;  
XX KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;  
XX tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;  
XX fms-like tyrosine kinase 1; kinase insert domain containing receptor;  
XX foetal liver kinase 1; ss.  
XX  
XX OS Homo sapiens.  
XX  
XX PN WO9715662-A2.  
XX  
XX PD 01-MAY-1997.  
XX  
XX PF 25-OCT-1996; 96WO-US017480.  
XX  
XX PR 26-OCT-1995; 95US-0005974P.  
XX  
XX PR 11-JAN-1996; 96US-00584040.  
XX  
XX PA (RIBO-) RIBOZYME PHARM INC.  
XX  
XX PA (CHIR ) CHIRON CORP.  
XX  
XX PI Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;  
XX  
XX DR WPI; 1997-259017/23.  
XX  
XX PT Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA  
XX stability - useful for treating e.g. tumour angiogenesis, psoriasis,  
XX rheumatoid arthritis, etc., in a human patient.  
XX  
XX PS Claim 4; Page 79; 218pp; English.  
XX  
XX CC The present invention describes nucleic acid molecules which modulate the  
XX synthesis, expression and/or stability of a mRNA encoding 1 or more  
XX receptors of vascular endothelial growth factor (VEGF). A patient  
XX (preferably human) having a condition associated with the level of the  
XX fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing  
XX receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour  
XX angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be  
XX treated by administering the nucleic acid molecule or the expression  
XX vector to the patient. AAX67275 to AAX75752 represent specific examples  
XX of nucleic acid molecules from the present invention  
XX  
XX Sequence 17 BP; 1 A; 2 C; 0 G; 0 T; 14 U; 0 Other;

```
Query Match      0.5%; Score 13; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 4.2e+03;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      2786 AAAAAAAAAAAAAA 2798
Db      17 AAAAAAAAAAAAAA 5

RESULT 5294
ADC64943/c
ID      ADC64943 standard; DNA; 18 BP.
XX
AC      ADC64943;
XX
DT      18-DEC-2003 (first entry)
XX
DE      Camellia sinensis L. (O.) Kuntze related PCR primer T11G.
XX
KW      Camellia sinensis L.(O.) Kuntze; tea tree; PCR primer; ss.
XX
OS      Synthetic.
OS      Camellia sinensis.
XX
PN      CN1377966-A.
XX
PD      06-NOV-2002.
XX
PF      30-MAR-2001; 2001CN-00112459.
XX
PR      30-MAR-2001; 2001CN-00112459.
XX
PA      (SCIN-) SCI & IND RES COMMISSION.
XX
WPI; 2003-230959/23.
Cloning of a new gene sequence expressed and inhibited during winter
dormancy of a tea tree top plumelet, comprises identification, cloning
and analysis of a new primer in the gene sequence.

Example 3; Page 32; 66pp; Chinese.

The present invention describes the cloning of a new gene sequence
expressed and inhibited during hibernation of the top plumelet of a
Camellia sinensis L.(O.) Kuntze tea tree. Also described is the
identification, cloning and analysis of a primer terminal in the gene
sequence expressed and inhibited during hibernation of the top plumelet
of the tea tree. The present sequence represents a PCR primer which is
used in an example from the present invention.

Sequence 18 BP; 2 A; 1 C; 2 G; 13 T; 0 U; 0 Other;

Query Match      0.5%; Score 13; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 4.6e+03;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      2786 AAAAAAAAAAAAAA 2798
Db      17 AAAAAAAAAAAAAA 5

RESULT 5295
ADC64941/c
ID      ADC64941 standard; DNA; 18 BP.
XX
AC      ADC64941;
XX
DT      18-DEC-2003 (first entry)
XX
DE      Camellia sinensis L. (O.) Kuntze related PCR primer T11A.
XX
KW      Camellia sinensis L.(O.) Kuntze; tea tree; PCR primer; ss.
```

```
XX
OS      Synthetic.
OS      Camellia sinensis.
XX
PN      CN1377966-A.
XX
PD      06-NOV-2002.
XX
PF      30-MAR-2001; 2001CN-00112459.
XX
PR      30-MAR-2001; 2001CN-00112459.
XX
PA      (SCIN-) SCI & IND RES COMMISSION.
XX
WPI; 2003-230959/23.
Cloning of a new gene sequence expressed and inhibited during winter
dormancy of a tea tree top plumelet, comprises identification, cloning
and analysis of a new primer in the gene sequence.

Example 3; Page 32; 66pp; Chinese.

The present invention describes the cloning of a new gene sequence
expressed and inhibited during hibernation of the top plumelet of a
Camellia sinensis L.(O.) Kuntze tea tree. Also described is the
identification, cloning and analysis of a primer terminal in the gene
sequence expressed and inhibited during hibernation of the top plumelet
of the tea tree. The present sequence represents a PCR primer which is
used in an example from the present invention.

Sequence 18 BP; 3 A; 1 C; 1 G; 13 T; 0 U; 0 Other;

Query Match      0.5%; Score 13; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 4.6e+03;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      2786 AAAAAAAAAAAAAA 2798
Db      17 AAAAAAAAAAAAAA 5

RESULT 5296
AAC83562/c
ID      AAC83562 standard; DNA; 19 BP.
XX
AC      AAC83562;
XX
DT      28-FEB-2001 (first entry)
XX
DE      DNA synthesis method linker/primer sequence SEQ ID NO: 1.
XX
KW      DNA synthesis; directional complementary DNA library; linker; PCR primer;
KW      ss.
XX
OS      Synthetic.
XX
PN      US6143531-A.
XX
PD      07-NOV-2000.
XX
PF      22-JUL-1997; 97US-00899029.
XX
PR      19-SEP-1988; 88US-00246567.
PR      02-MAY-1991; 91US-00700066.
PR      23-NOV-1992; 92US-00981931.
PR      02-SEP-1993; 93US-00116049.
XX
PA      (STRA-) STRATAGENE.
XX
PI      Hansen CJ, Huse WD;
XX
DR      WPI; 2001-006435/01.
XX
```

PT Double stranded DNA synthesis with specific orientation comprises  
PT synthesizing a first strand of DNA complementary to a selected DNA or RNA  
PT template and synthesizing second strand complementary to first one.

PS Example 1; Fig 1; 14pp; English.

XX  
CC The present invention describes an improved method of DNA synthesis which  
CC provides double stranded DNA where the predetermined orientation of the  
CC sequence is preserved. This can be used in the construction of  
CC complementary DNA and directional DNA libraries

XX SQ Sequence 19 BP; 1 A; 2 C; 2 G; 14 T; 0 U; 0 Other;

Query Match 0.5%; Score 13; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 4.9e+03;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2786 AAAAAAAAAAAAAA 2798  
Db 19 AAAAAAAAAAAAAA 7

RESULT 5297  
ABZ92288  
ID ABZ92288 standard; DNA; 20 BP.

XX AC ABZ92288;

XX DT 17-OCT-2003 (first entry)

XX DE Human oligonucleotide sequence.

XX KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiqunone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.

XX OS Homo sapiens.

XX PN WO200285308-A2.

XX PD 31-OCT-2002.

XX PF 23-APR-2002; 2002WO-US013135.

XX PR 24-APR-2001; 2001US-0286137P.

XX PA (EPIG-) EPIGENESIS PHARM INC.

XX PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;

XX DR WPI; 2003-229219/22.

XX PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiqunone.

XX PS Disclosure; SEQ ID NO 7530; 872pp; English.

XX CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiqunone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or

CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiqunone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences

XX SQ Sequence 20 BP; 2 A; 5 C; 1 G; 12 T; 0 U; 0 Other;

Query Match 0.5%; Score 13; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 5.2e+03;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2164 CCTTTTCTTTT 2176  
Db 1 CCTTTTCTTTT 13

RESULT 5298  
AAZ74552/C  
ID AAZ74552 standard; DNA; 20 BP.

XX AC AAZ74552;

XX DT 10-SEP-2001 (first entry)

XX DE Human biallelic marker downstream amplification primer SEQ ID NO:8908.

XX KW Human genome; biallelic marker; high density disequilibrium map;  
KW genomic map; haplotype; phenotype; polymorphic base; genotyping;  
KW haplotyping; hybridisation; identification; characterisation;  
KW amplification; single nucleotide polymorphism; SNP; PCR primer;  
KW diagnosis; ss.

XX OS Homo sapiens.

XX PN WO9954500-A2.

XX PD 28-OCT-1999.

XX PF 21-APR-1999; 99WO-IB000822.

XX PR 21-APR-1998; 98US-0082614P.

XX PR 23-NOV-1998; 98US-0109732P.

XX PA (GEST ) GENSET.

XX PI Cchen D, Blumenfeld M, Chumakov I;

XX DR WPI; 2000-013267/01.

XX PT Novel biallelic markers used to construct a high density disequilibrium  
PT map of the human genome.

XX PS Claim 8; Page 2130; 2745pp; English.

XX CC AAZ65654 to AAZ69578 represent human biallelic markers from the present  
CC invention, which contain a polymorphic base at position 24 of their  
CC nucleotide sequences. AAZ69579 to AAZ77440 represent amplification  
CC primers for the biallelic markers. The biallelic markers of the invention  
CC have a variety of uses: they can be used for high density mapping of the  
CC human genome, and in complex association studies and haplotyping studies  
CC which are useful in determining the genetic basis for disease states.  
CC Compositions and methods of the invention can also be useful for the  
CC identification of the targets for the development of pharmaceutical  
CC agents and diagnostic methods, as well as the characterisation of the  
CC differential efficacious responses to and side effects from  
CC pharmaceutical agents acting on a disease as well as other treatment.  
CC N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and



```
CC 3367, are not actually given a sequence in the Sequence Listing from the
CC present invention
XX
SQ Sequence 20 BP; 11 A; 3 C; 4 G; 2 T; 0 U; 0 Other;

Query Match      0.5%; Score 13; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 5.2e+03;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1096 TGTTCATTGGCT 1108
Db 13 TGTTCATTGGCT 1

RESULT 5299
AAH88904/c
ID AAH88904 standard; DNA; 21 BP.
XX
AC AAH88904;
XX
DT 27-FEB-2002 (first entry)
XX
DE Human polymorphic oligonucleotide M33494 fragment #19.
XX
KW Human; single nucleotide polymorphic; SNP; forensic science;
KW paternity testing; phenotypic trait; genetic mapping; animal breeding;
KW plant breeding; ds.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT Variation replace(11,a)
FT /*tag= a
FT /standard_name= "single nucleotide polymorphism"
XX
PN WO200134840-A2.
XX
PD 17-MAY-2001.
XX
PF 10-NOV-2000; 2000WO-US030766.
XX
PR 10-NOV-1999; 99US-0164596P.
XX
PA (GLAX ) GLAXO GROUP LTD.
PA (AFFY-) AFFYMETRIX INC.
XX
PI Au K, Chen J, Patil N, Thomas D;
XX
WPI; 2001-335945/35.
XX
New polymorphic sites derived from the human genome are useful to
determine sites correlating with phenotypic traits, particularly disease,
and also in forensics and paternity testing.
XX
PS Claim 37; Page 9; 43pp; English.
XX
The present invention relates to human oligonucleotides comprising a
single nucleotide polymorphic site (SNP: AAH88797-AAH89219). The present
sequence is one such oligonucleotide. The oligonucleotides can be used in
forensics, paternity testing, correlation of polymorphisms with
phenotypic traits, genetic mapping of phenotypic traits and marker
assisted breeding of animals and crop plants
XX
SQ Sequence 21 BP; 2 A; 7 C; 10 G; 2 T; 0 U; 0 Other;

Query Match      0.5%; Score 13; DB 1; Length 21;
Best Local Similarity 76.2%; Pred. No. 5.4e+03;
Matches 16; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 447 CGCCACAGCCAGCCAGC 467
Db 21 CGCCCGCCTGCAGCCAGGTGC 1
```

```
RESULT 5300
AAQ61989/c
ID AAQ61989 standard; DNA; 21 BP.
XX
AC AAQ61989;
XX
DT 25-MAR-2003 (revised)
DT 04-NOV-1994 (first entry)
XX
DE HIV replication inhibiting oligomer, T13G4T4.
XX
KW Inhibition; replication; herpes simplex virus; HSV; HIV; retard;
KW human cytomegalovirus; influenza virus; inflammation; telomere length;
KW neurological disorders; phospholipase A2 activity; hyperproliferation;
KW malignancy; cardiovascular disease; snake bite; malignancy; aging; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1
FT /*tag= a
FT /note= "Labeled with 32P"
XX
PN WO9408053-A1.
XX
PD 14-APR-1994.
XX
PF 29-SEP-1993; 93WO-US0009297.
XX
PR 29-SEP-1992; 92US-00954185.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Hanecak RC, Anderson KP, Bennett CF, Chiang M, Brown-Driver VL;
PI Ecker DJ, Vickers TA, Wyatt JR, Imbach JL;
XX
WPI; 1994-135613/16.
XX
New modified oligo-nucleotide contg guanine quartet - inhibits activity
of viruses, e.g. HIV, and phospholipase A2 and modulates telomere length
of chromosomes.
XX
Example 21; Page 60; 144pp; English.
XX
This sequence may be used for inhibiting replication of human immuno-
deficiency virus (HIV). Oligonucleotides such as this may also be used
for inhibiting activity of HSV, human cytomegalovirus or influenza virus,
or for treating inflammatory and neurological disorders caused by
phospholipase A2 activity in cases of hyper- proliferation, malignancy,
cardiovascular disease and snake bite. They may also be used for
inhibiting division of malignant cells by modulating telomere length,
which may also retard aging. (Updated on 25-MAR-2003 to correct PN
field.)
XX
SQ Sequence 21 BP; 0 A; 0 C; 4 G; 17 T; 0 U; 0 Other;

Query Match      0.5%; Score 13; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 5.4e+03;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2786 AAAAAAAAAAAAAA 2798
Db 13 AAAAAAAAAAAAAA 1

RESULT 5301
AAT35001/c
ID AAT35001 standard; DNA; 21 BP.
XX
AC AAT35001;
XX
DT 25-MAR-2003 (revised)
```

DT 03-DEC-1996 (first entry)  
XX HIV inhibitor #4.  
DE  
XX HIV; infection inhibitor; triplex forming; purine rich promoter; V3 loop;  
KW transcription inhibitor; gp120 protein; viral growth; enzyme inhibitor;  
KW PLA2; telomere length; glove coating; condom; ss.  
XX  
OS Synthetic.  
XX  
FH Key Location/Qualifiers  
FT misc\_feature 1..21  
FT /\*tag= a  
FT /note= "phosphorothioate nucleotides"  
XX  
PN US5523389-A.  
XX  
PD 04-JUN-1996.  
XX  
PF 28-SEP-1993; 93US-00128011.  
XX  
PR 29-SEP-1992; 92US-00954185.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Imbach JL, Ecker DJ, Wyatt JR;  
XX WPI; 1996-285782/29.  
DR  
XX New octa:nucleotide with guanosine quartet and phosphorothioate links -  
PT is inhibitor of HIV infection by binding to the V3 loop.  
XX  
XX Example 3; Col 8; 14pp; English.  
PS  
XX AAT34998-T35001 represent HIV inhibitors. Sequences containing only G and  
CC T residues (such as these sequences) are triplex forming  
CC oligonucleotides, and form purine rich promoter elements used to inhibit  
CC transcription. These sequences bind to the HIV gp120 protein at the V3  
CC loop via the internal guanosine quartet. This binding prevents cell-to-  
CC cell and virus-to-cell infection. The sequences may also be used for  
CC inhibiting viral growth, and other viral genes, for inhibiting the enzyme  
CC PLA2, and to modulate telomere length. In some cases these sequences need  
CC to be chemically modified. The chemically modified oligonucleotides  
CC preferably include at least one phosphorothioate linkage. Other modified  
CC intersugar links, or 2'-modified sugar residues can also be used. These  
CC oligonucleotides can be used for coating gloves, condoms, etc, or for  
CC topical application. (Updated on 25-MAR-2003 to correct PF field.)  
XX  
SQ Sequence 21 BP; 0 A; 0 C; 4 G; 17 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 5.4e+03;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 2786 AAAAAAAAAAAAAA 2798  
Db 13 AAAAAAAAAAAAAA 1  
RESULT 5302  
AAZ26572/c  
ID AAZ26572 standard; DNA; 21 BP.  
XX  
AC AAZ26572;  
XX  
DT 30-NOV-1999 (first entry)  
XX  
DE Human polymorphic region 761.  
XX  
KW Polymorphism; human; inhibitor; cancer; treatment; cell growth; LOH;  
KW cell viability; loss of heterozygosity; precancerous condition; ASI;  
KW allele specific inhibitor; somatic cell; diagnosis; prevention;  
KW atherosclerotic plaque; premalignant metaplastic lesion; endometriosis;

KW dysplastic lesion; benign tumour; polycystic kidney disease; transplant;  
KW graft versus host disease; malignant cell removal; bone marrow; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO9841648-A2.  
XX  
PD 24-SEP-1998.  
XX  
PF 19-MAR-1998; 98WO-US005419.  
XX  
PR 20-MAR-1997; 97US-0041057P.  
XX  
PA (VARI-) VARIAGENICS INC.  
XX  
PI Housman D, Ledley FD, Stanton VP;  
XX WPI; 1998-521232/44.  
DR  
XX Identifying target genes for allele-specific drugs - used for diagnosis,  
PT prevention and treatment of, e.g. cancers, atherosclerotic plaque,  
PT dysplastic lesions, endometriosis or graft versus host disease.  
XX  
PS Disclosure; Fig 7; 605pp; English.  
XX  
CC This invention describes a novel method for identifying an inhibitor  
CC potentially useful for treatment of cancer, where the inhibitor is active  
CC on a gene vital for cell growth or viability, and where the gene is  
CC subject to loss of heterozygosity (LOH) in a cancer. The inhibitor is  
CC used for preventing the development of cancer in a patient having a  
CC precancerous condition, by administering to the patient a first allele  
CC specific inhibitor (ASI) targeted to an allele of a first essential gene  
CC present in cells of the precancerous condition, where the normal somatic  
CC cells of the patient are heterozygous for the first gene, the inhibitor  
CC is active on at least one but less than all allelic forms of the gene  
CC present in a population and targets only one allelic form present in the  
CC normal somatic cells, and the first gene. The products and methods can be  
CC used in the diagnosis, prevention and treatment of LOH disorders, e.g.  
CC cancers, atherosclerotic plaques, premalignant metaplastic or dysplastic  
CC lesions, benign tumours, endometriosis, polycystic kidney disease, and  
CC graft versus host disease. The method can also be used to remove  
CC malignant cells from bone marrow transplants. AAZ25812-226925 represent  
CC human polymorphic sites described in the method of the invention  
XX  
SQ Sequence 21 BP; 13 A; 1 C; 3 G; 4 T; 0 U; 0 Other;  
Query Match 0.5%; Score 13; DB 1; Length 21;  
Best Local Similarity 76.2%; Pred. No. 5.4e+03;  
Matches 16; Conservative 0; Mismatches 5; Indels 0; Gaps 0;  
QY 2175 TTTTTTTTTTTAACTTTGAA 2195  
Db 21 TTTTTTTTATCAATCTGCA 1  
RESULT 5303  
AAV58375/c  
ID AAV58375 standard; DNA; 22 BP.  
XX  
AC AAV58375;  
XX  
DT 26-NOV-1998 (first entry)  
XX  
DE Biotinylated primer for mouse thymus and spleen mRNA.  
XX  
KW PCR primer; differential mRNA expression; gene expression analysis;  
KW thymus; spleen; mouse; mRNA expression detection; ss.  
XX  
OS Synthetic.  
OS Mus sp.  
XX  
FH Key Location/Qualifiers  
FT modified\_base 1

```
FT      /*tag= a
FT      /note= "biotinylated"
XX
PN      US5814445-A.
XX
PD      29-SEP-1998.
XX
XX      11-JUL-1995; 95US-00499899.
PF
XX      11-JUL-1994; 94RU-00024056.
XX
PR      (NYBL-) NEW YORK BLOOD CENTER INC.
XX
PI      Ivanova NB, Belyavsky AV;
XX
DR      WPI; 1998-541742/46.
XX
XX      Identification of differential mRNA expression - based on signal
PT      intensities from separated cDNA restriction fragments.
PT
XX      Example; Col 7; 15pp; English.
PS
XX      This sequence represents a PCR primer used in the method of the
CC      invention. The method is for the identification of differential mRNA
CC      expression among two or more different sources, comprises: (a) obtaining
CC      mRNA samples from two or more sources; (b) synthesising a set of double
CC      stranded cDNA from each of the mRNA samples; (c) generating a set of cDNA
CC      fragments for each sample by cleaving the sets of cDNA with at least one
CC      restriction endonuclease; (d) separating cDNA fragments obtained through
CC      step (c) by gel electrophoresis; (e) obtaining pictures of the separated
CC      cDNA fragments; (f) comparing pictures of separated cDNA fragments, and
CC      (g) identifying specific cDNA fragments exhibiting different signal
CC      intensities in the pictures of separated cDNA fragments, where
CC      differential signal intensity of the cDNA fragments is indicative of
CC      differential expression of mRNA species among the sources. This primer
CC      was specifically used to differentiate between mRNA differentially
CC      expressed in mouse thymus and spleen. The method is useful in medicine
CC      and molecular biology for analysis of gene expression and diagnosis and
CC      identification of mechanisms of pathology at the genetic level
XX
SQ      Sequence 22 BP; 1 A; 3 C; 5 G; 13 T; 0 U; 0 Other;

Query Match      0.5%; Score 13; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 5.6e+03;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      2786 AAAAAAAAAAAAAA 2798
Db      |||||
        22 AAAAAAAAAAAAAA 10

RESULT 5304
AAA99617/c
ID      AAA99617 standard; DNA; 22 BP.
XX
AC      AAA99617;
XX
DT      22-JAN-2001 (first entry)
XX
DE      (T)-primer for first strand cDNA synthesis.
XX
KW      cDNA synthesis; gene expression analysis; genetic diagnosis; primer; ss.
XX
OS      Synthetic.
XX
XX      Key      Location/Qualifiers
FH      modified_base 1
FT      /note= "labelled with biotin"
XX
XX      US6120996-A.
PN
XX      19-SEP-2000.
PD
XX
```

```
PF      06-NOV-1997; 97US-00964143.
XX
XX      11-JUL-1994; 94RU-00024056.
PR      11-JUL-1995; 95US-00499899.
XX
PA      (NYBL-) NEW YORK BLOOD CENT INC.
XX
PI      Ivanova NB, Belyavsky AV;
XX
DR      WPI; 2000-627874/60.
XX
XX      Identifying differentially expressed messenger RNAs, useful for analyzing
PT      gene expression or identifying mechanisms of pathology, comprises
PT      assessing amounts of separated complementary DNA fragments corresponding
PT      to the mRNA.
XX
XX      Example; Col 7; 15pp; English.
XX
XX      The present sequence is a primer used for first strand synthesis of cDNA
CC      molecules from RNA extracted from mouse thymus and spleen. This was
CC      performed as part of novel method for identifying differentially
CC      expressed mRNA. The method comprises synthesising sets of fragments of
CC      cDNA from a set of mRNA sequences, assessing the amounts of cDNA
CC      fragments corresponding to the mRNA species, and comparing the signal
CC      intensity from the separated cDNA fragments. The method is useful for the
CC      analysis of gene expression and the diagnosis and identification of
CC      genetic mechanisms of pathology. Unlike RT-PCR using arbitrary primers,
CC      many sequences are amplified in a single reaction. The method is more
CC      reproducible than prior art, allowing for a reliable comparison to be
CC      made with independently conducted experiments. The method also makes it
CC      possible to eliminate the excess of information that is characteristic
CC      for the method with arbitrary primers
XX
SQ      Sequence 22 BP; 1 A; 3 C; 5 G; 13 T; 0 U; 0 Other;

Query Match      0.5%; Score 13; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 5.6e+03;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      2786 AAAAAAAAAAAAAA 2798
Db      |||||
        22 AAAAAAAAAAAAAA 10

RESULT 5305
AAL56810/c
ID      AAL56810 standard; DNA; 22 BP.
XX
AC      AAL56810;
XX
DT      06-NOV-2003 (first entry)
XX
DE      T(13) bio-primer oligonucleotide to synthesise the first cDNA strand.
XX
KW      PCR; primer; ss; differential expression; gene expression analysis;
KW      signal intensity; T(13) bio-primer; mouse; murine.
XX
OS      Mus sp.
XX
XX      US2003017490-A1.
PN
XX      23-JAN-2003.
PD
XX      18-JUN-2002; 2002US-00173509.
PF
XX      11-JUL-1994; 94RU-00024056.
PR      11-JUL-1995; 95US-00499899.
PR      06-NOV-1997; 97US-00964143.
PR      11-FEB-1999; 99US-00247871.
PR      18-SEP-2000; 2000US-00664534.
XX
XX      (NYBL-) NEW YORK BLOOD CENT INC.
PA
XX
```

PI Belyavsky AV, Ivanova NB;  
XX WPI; 2003-584989/55.  
DR  
XX  
XX  
PT Identifying differentially expressed mRNA, by separating cDNAs  
PT synthesized from mRNA of various cells by electrophoresis, comparing the  
PT separation pictures, identifying fragments with differential signal  
PT intensities.  
XX  
PS Example; Fig 1; 13pp; English.  
XX  
CC This invention relates to a novel method for identifying differentially  
CC expressed mRNA molecules. It comprises synthesizing cDNA molecules from  
CC sets of mRNA fragments derived from different cell types and separating  
CC the resultant cDNAs by gel electrophoresis. By comparison of these  
CC separation pictures it is possible to identify those cDNA fragments that  
CC exhibit differential signal intensities between various cell types.  
CC Furthermore, those cDNA molecules identified as being differentially  
CC expressed can be amplified and cloned as required. For the formation of a  
CC set of fragments, the cDNA is cleaved by restriction endonucleases, such  
CC that the fragments specifically correspond to the 3' or 5' end regions of  
CC the mRNA molecules. The method of this invention can be useful in  
CC medicine for diagnostic purposes, molecular biology for the analysis of  
CC gene expression, as well as in the identification of pathology mechanisms  
CC at a genetic level. This oligonucleotide sequence is the T(13) bio-primer  
CC used to synthesise the first cDNA chain from the total RNA preparation,  
CC extracted from the cell type of interest, a method of the invention  
XX  
SQ Sequence 22 BP; 1 A; 3 C; 5 G; 13 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 5.6e+03;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 2786 AAAAAAAAAAAAAA 2798  
Db | | | | | | | | | | | | | | | |  
22 AAAAAAAAAAAAAA 10  
  
RESULT 5306  
AAC96274/c  
ID AAC96274 standard; DNA; 24 BP.  
XX  
AC AAC96274;  
XX  
DT 26-FEB-2001 (first entry)  
XX  
DE HLA DPB1 gene PCR primer #6.  
XX  
KW DNA sequence analysis; sequencing; protein sequence; protein structure;  
KW gene typing; organ donation; bacteria identification; 16s rRNA; HLA;  
KW human leukocyte antigen; PCR primer; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO200065088-A2.  
XX  
PD 02-NOV-2000.  
XX  
PF 20-APR-2000; 2000WO-EP003636.  
XX  
PR 26-APR-1999; 99EP-00303215.  
XX  
PA (AMSH ) AMERSHAM PHARMACIA BIOTECH AB.  
XX  
PI Ulfendahl P, Wong K;  
XX  
KW Identifying extendible primers for use in identification, or  
KW gene typing; organ donation; bacteria identification; 16s rRNA; HLA;  
KW human leukocyte antigen; PCR primer; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO200065088-A2.  
XX  
PD 02-NOV-2000.  
XX  
PF 20-APR-2000; 2000WO-EP003636.  
XX  
PR 26-APR-1999; 99EP-00303215.  
XX  
PA (AMSH ) AMERSHAM PHARMACIA BIOTECH AB.  
XX  
PI Ulfendahl P, Wong K;  
XX  
DR WPI; 2000-679677/66.  
XX  
SQ Identifying extendible primers for use in identification, or  
PT classification of a nucleic acid of an organism, allele or gene such as  
PT class 1/2 HLA comprises identifying all possible nucleotide sequences of  
PT specific length.

XX Claim 14; Page 48; 66pp; English.  
PS  
XX  
XX  
CC The present invention provides a method for identifying a set of  
CC extendible primers which can be used in the identification, typing and  
CC classification of genes. This can then be used to predict protein  
CC sequence and structure, in organ donation to match the organ with the  
CC receiver, and to identify bacteria in a sample. The method can be used to  
CC type the human leukocyte antigen genes (HLA) and 16s rRNA genes in  
CC particular  
XX  
SQ Sequence 24 BP; 4 A; 3 C; 4 G; 13 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13; DB 1; Length 24;  
Best Local Similarity 76.2%; Pred. No. 5.7e+03;  
Matches 16; Conservative 0; Mismatches 5; Indels 0; Gaps 0;  
  
QY 2776 GTTAGAATTGAAAAAAAAA 2796  
Db | | | | | | | | | | | | | | | |  
21 GCTCGTAGTTAAAAAAAAA 1  
  
RESULT 5307  
AAC96374  
ID AAC96374 standard; DNA; 25 BP.  
XX  
AC AAC96374;  
XX  
DT 26-FEB-2001 (first entry)  
XX  
DE HLA DPB1 gene PCR primer #106.  
XX  
KW DNA sequence analysis; sequencing; protein sequence; protein structure;  
KW gene typing; organ donation; bacteria identification; 16s rRNA; HLA;  
KW human leukocyte antigen; PCR primer; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO200065088-A2.  
XX  
PD 02-NOV-2000.  
XX  
PF 20-APR-2000; 2000WO-EP003636.  
XX  
PR 26-APR-1999; 99EP-00303215.  
XX  
PA (AMSH ) AMERSHAM PHARMACIA BIOTECH AB.  
XX  
PI Ulfendahl P, Wong K;  
XX  
KW WPI; 2000-679677/66.  
XX  
PT Identifying extendible primers for use in identification, or  
PT classification of a nucleic acid of an organism, allele or gene such as  
PT class 1/2 HLA comprises identifying all possible nucleotide sequences of  
PT specific length.  
XX  
PS Claim 14; Page 50; 66pp; English.  
XX  
XX  
CC The present invention provides a method for identifying a set of  
CC extendible primers which can be used in the identification, typing and  
CC classification of genes. This can then be used to predict protein  
CC sequence and structure, in organ donation to match the organ with the  
CC receiver, and to identify bacteria in a sample. The method can be used to  
CC type the human leukocyte antigen genes (HLA) and 16s rRNA genes in  
CC particular  
XX  
SQ Sequence 25 BP; 4 A; 6 C; 2 G; 13 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 13; DB 1; Length 25;  
Best Local Similarity 76.2%; Pred. No. 5.6e+03;  
Matches 16; Conservative 0; Mismatches 5; Indels 0; Gaps 0;







XX 27-MAR-1998; 98US-0079678P.  
XX (RIBO-) RIBOZYME PHARM INC.  
XX Pavco PA, Roberts E, Jarvis T, Coeshott C, Mcswiggen JA;  
XX WPI; 1999-591315/50.  
XX Novel ribozymes for modulating the synthesis, expression and/or stability  
XX of an mRNA encoding an angiogenic factors.  
XX Claim 54; Page 254; 305pp; English.  
XX The present invention describes enzymatic nucleic acid molecules with RNA  
XX cleaving activity, which specifically cleave RNA encoded by an aryl  
XX hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3  
XX gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to  
XX AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT,  
XX and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their  
XX corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to  
XX AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086  
XX and AAA19155 to AAA19222 represent their corresponding target sequences;  
XX AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme  
XX sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and  
XX AAA21596 to AAA21688 represent their corresponding target sequences;  
XX AAA21689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequence  
XX for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to  
XX AAA23422 represent their corresponding target sequences. The ribozymes of  
XX the invention are used for modulating the synthesis, expression and/or  
XX stability of an mRNA encoding angiogenic factor, especially ARNT,  
XX integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are  
XX especially used to treat cancer, diabetic retinopathy, age related  
XX macular degeneration (ARMD), inflammation, and arthritis, as well as  
XX neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,  
XX angiofibroma of tuberous sclerosis, pot-wine stains, Sturge Weber  
XX syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,  
XX and other syndromes and diseases related to the levels of ARNT, Tie-2,  
XX integrin subunit alpha-6, or integrin subunit beta-3  
XX  
XX Sequence 17 BP; 14 A; 0 C; 0 G; 0 T; 3 U; 0 Other;  
Query Match 0.5%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 4.5e+03;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 2786 AAAAAAAAAAAAAA 2801  
Db ||||| ||||| |||||  
2 AAAAAUUAAAAAAAAA 17  
RESULT 5313  
AAA25444/c  
ID AAA25444 standard; DNA; 17 BP.  
XX  
AC AAA25444;  
XX  
DT 19-JUL-2000 (first entry)  
XX  
DE Oestrogen receptor hammerhead ribozyme target sequence SEQ ID NO:1942.  
XX  
KW Oestrogen receptor; c-raf; k-ras; bcl-2; ribozyme; cleavage;  
XX hammerhead ribozyme; hairpin ribozyme; antisense oligonucleotide;  
KW gene expression modification; cancer; phosphorothioate; endonuclease;  
KW anticancer; breast cancer; endometrium cancer; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO9954459-A2.  
XX  
PD 28-OCT-1999.  
XX  
PF 19-APR-1999; 99WO-US008547.  
XX

XX 20-APR-1998; 98US-0082404P.  
XX 23-JUN-1998; 98US-00103636.  
XX (RIBO-) RIBOZYME PHARM INC.  
XX Thompson JD, Beigelman L, Mcswiggen JA, Karpeisky A, Bellon L;  
XX Reynolds M, Zwick M, Jarvis T, Woolf T, Haerberli P;  
XX Matulic-Adamic J;  
XX WPI; 2000-013248/01.  
XX New nucleic acids that interact, and optionally cleave, target sequences,  
XX used to treat cancer.  
XX Claim 77; Page 79; 148pp; English.  
XX The present invention describes nucleic acids (A) that interact stably  
XX with a target sequence and contain at least one phosphoro(di)thioate  
XX link, having endonuclease activity. (A), and more generally any catalytic  
XX nucleic acid (A') that modulates expression of the oestrogen receptor  
XX gene, are used to treat cancer (particularly of breast or endometrium),  
XX in vivo or by transforming cells ex vivo and implanting treated cells, or  
XX for other conditions associated with levels of oestrogen receptor.  
XX Because of the high selectivity for targeted RNA, (A) can also be used to  
XX correlate inhibition of gene expression with alterations in phenotype,  
XX particularly for identification of therapeutic targets, and as research  
XX reagents (for RNA, in the same way that restriction endonucleases are  
XX used with DNA). The combination of modifications in (A) improves  
XX resistance to nucleases, binding affinity and/or activity. AAA23503 to  
XX AAA24747 represent oestrogen receptor hammerhead ribozyme sequences, and  
XX AAA24748 to AAA25992 represent their corresponding target sequences.  
XX AAA25993 to AAA26105 represent oestrogen receptor hairpin ribozyme  
XX sequences, and AAA26107 to AAA26218 represent their corresponding target  
XX sequences. AAA26219 to AAA26271 represent other ribozyme sequences and  
XX antisense oligonucleotides used in the exemplification of the present  
XX invention  
XX Sequence 17 BP; 2 A; 0 C; 1 G; 14 T; 0 U; 0 Other;  
Query Match 0.5%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 4.5e+03;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 2786 AAAAAAAAAAAAAA 2801  
Db ||||| ||||| |||||  
17 AAAAAAAAAAACTAAA 2  
RESULT 5314  
AAA25455/c  
ID AAA25455 standard; DNA; 17 BP.  
XX  
AC AAA25455;  
XX  
DT 19-JUL-2000 (first entry)  
XX  
DE Oestrogen receptor hammerhead ribozyme target sequence SEQ ID NO:1953.  
XX  
KW Oestrogen receptor; c-raf; k-ras; bcl-2; ribozyme; cleavage;  
XX hammerhead ribozyme; hairpin ribozyme; antisense oligonucleotide;  
KW gene expression modification; cancer; phosphorothioate; endonuclease;  
KW anticancer; breast cancer; endometrium cancer; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO9954459-A2.  
XX  
PD 28-OCT-1999.  
XX  
PF 19-APR-1999; 99WO-US008547.  
XX  
XX 20-APR-1998; 98US-0082404P.

PR 23-JUN-1998; 98US-00103636.  
XX (RIBO-) RIBOZYME PHARM INC.  
PA  
XX  
PI Thompson JD, Beigelman L, Mcswiggen JA, Karpeisky A, Bellon L;  
PI Reynolds M, Zwick M, Jarvis T, Woolf T, Haerberli P;  
PI Matulic-Adamic J;  
XX  
XX  
DR WPI; 2000-013248/01.  
XX  
XX New nucleic acids that interact, and optionally cleave, target sequences,  
PT used to treat cancer.  
PT  
XX  
PS Claim 77; Page 79; 148pp; English.  
XX  
CC The present invention describes nucleic acids (A) that interact stably  
CC with a target sequence and contain at least one phosphoro(di)thioate  
CC link, having endonuclease activity. (A), and more generally any catalytic  
CC nucleic acid (A') that modulates expression of the oestrogen receptor  
CC gene, are used to treat cancer (particularly of breast or endometrium), or  
CC in vivo or by transforming cells ex vivo and implanting treated cells, or  
CC for other conditions associated with levels of oestrogen receptor.  
CC Because of the high selectivity for targeted RNA, (A) can also be used to  
CC correlate inhibition of gene expression with alterations in phenotype,  
CC particularly for identification of therapeutic targets, and as research  
CC reagents (for RNA, in the same way that restriction endonucleases are  
CC used with DNA). The combination of modifications in (A) improves  
CC resistance to nucleases, binding affinity and/or activity. AAA23503 to  
CC AAA24747 represent oestrogen receptor hammerhead ribozyme sequences, and  
CC AAA24748 to AAA25992 represent their corresponding target sequences.  
CC AAA25993 to AAA26105 represent oestrogen receptor hairpin ribozyme  
CC sequences, and AAA26107 to AAA26218 represent their corresponding target  
CC sequences. AAA26219 to AAA26271 represent other ribozyme sequences and  
CC antisense oligonucleotides used in the exemplification of the present  
CC invention  
XX  
SQ Sequence 17 BP; 2 A; 0 C; 1 G; 14 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 4.5e+03;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 2782 ATTGAAAAA 2797  
Db 16 ATACAAAAA 1  
  
RESULT 5315  
AAF02388  
ID AAF02388 standard; DNA; 17 BP.  
XX  
XX  
AC AAF02388;  
XX  
DT 16-FEB-2001 (first entry)  
XX  
DE Hammerhead ribozyme substrate #683.  
XX  
KW Ribozyme; erythropoietin; granulocyte colony stimulating factor;  
KW interferon alpha; ss.  
XX  
OS Homo sapiens.  
XX  
XX WO200061729-A2.  
PN  
XX  
PD 19-OCT-2000.  
XX  
XX 11-APR-2000; 2000WO-US009721.  
PF  
XX  
PR 12-APR-1999; 99US-0129390P.  
XX  
XX (RIBO-) RIBOZYME PHARM INC.  
PA  
XX  
PI Blatt L, Zwick M, Pavco P, Mcswiggen J;

XX WPI; 2000-647423/62.  
DR  
XX  
XX  
PT Enzymatic and antisense nucleic acid inhibition of repressor genes,  
PT useful for producing e.g. granulocyte colony stimulating factor protein,  
PT interferon alpha and erythropoietin.  
XX  
PS Claim 37; Page 71; 164pp; English.  
XX  
XX The present invention relates to enzymatic and antisense nucleic acid  
CC molecules that act as inhibitors of the expression of repressor genes  
CC encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription  
CC factor gene, IRF-2 and/or the CAATT Displacement Protein (CDP).  
CC Inhibition of the repressors removes prevents inhibition (and  
CC consequently increases expression of) genes involved in the production of  
CC erythropoietin, granulocyte colony stimulating factor protein and  
CC interferon alpha  
XX  
SQ Sequence 17 BP; 14 A; 0 C; 2 G; 1 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 4.5e+03;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 2786 AAAAAA 2801  
Db 1 AAGAAAAATAAAAAA 16  
  
RESULT 5316  
ABS74957/C  
ID ABS74957 standard; DNA; 17 BP.  
XX  
AC ABS74957;  
XX  
DT 24-DEC-2002 (first entry)  
XX  
DE Human PAPP-Ea associated 17-mer SEQ ID 483.  
XX  
KW PAPP-E; human; pregnancy associated plasma protein E; abortive;  
KW contraceptive; gene therapy; vaccine; pregnancy; antenatal; diagnosis;  
KW dysgenetic pregnancy; primer; ss.  
XX  
OS Homo sapiens.  
XX  
PN US2002102252-A1.  
XX  
PD 01-AUG-2002.  
XX  
PF 06-APR-2001; 2001US-00827998.  
XX  
PR 26-MAY-2000; 2000US-0207456P.  
XX  
PA (GUY/) GU Y.  
PA (SHAN/) SHANNON M E.  
XX  
PI Gu Y, Shannon ME;  
XX  
DR WPI; 2002-697817/75.  
XX  
PT New isolated nucleic acid encoding an isoform of human pregnancy  
PT associated plasma protein E, for preventing or aborting pregnancy.  
XX  
PS Example 2; Page 138; 353pp; English.  
XX  
CC This invention describes a novel isolated nucleic acid that encodes one  
CC of three new isoforms of human pregnancy associated plasma protein E,  
CC hPAPP-E. The products of the invention have abortive and contraceptive  
CC activity and can be used for gene therapy or in a vaccine. The nucleic  
CC acid, polypeptide encoded by it, or antibody to the polypeptide can be  
CC used in pharmaceutical compositions or vaccines for preventing or  
CC aborting pregnancy. PAPP-E is used in the antenatal diagnosis of  
CC dysgenetic pregnancies. The nucleic acids are used as probes to assess



CC the level of PAPP-E isoform mRNA in chorionic villus samples, and the  
CC antibodies can be used to assess the expression levels of PAPP-E isoform  
CC proteins in chorionic villus samples, to diagnose dysgenetic pregnancies  
CC antenatally. This sequence represents an oligomer used in scanning the  
CC human PAPP-E genes described in the disclosure of the invention  
XX  
SQ Sequence 17 BP; 14 A; 0 C; 3 G; 0 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 4.5e+03;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 2163 TCCTTTTTCCTTTTTCCTTTT 2178  
Db 17 TTCTTTTCCTTTTTCCTTTT 2  
  
RESULT 5317  
ABZ65528/c  
ID ABZ65528 standard; RNA; 17 BP.  
XX ABZ65528;  
AC  
XX  
DT 21-MAR-2003 (first entry)  
XX  
DE Human HER2 DNazyme substrate #985.  
XX  
KW Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;  
KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;  
KW anti-rheumatic; cancer; AIDS; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO200297114-A2.  
XX  
PD 05-DEC-2002.  
XX  
PF 29-MAY-2002; 2002WO-US016840.  
XX  
PR 29-MAY-2001; 2001US-0294140P.  
PR 06-JUN-2001; 2001US-0296249P.  
PR 10-SEP-2001; 2001US-0318471P.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
XX  
PI Mcswiggen J;  
XX  
DR WPI; 2003-140484/13.  
XX  
PF 29-MAY-2002; 2002WO-US016840.  
XX  
PR 29-MAY-2001; 2001US-0294140P.  
PR 06-JUN-2001; 2001US-0296249P.  
PR 10-SEP-2001; 2001US-0318471P.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
XX  
PI Mcswiggen J;  
XX  
DR WPI; 2003-140484/13.  
XX  
PT Novel short interfering RNA and enzymatic nucleic acid useful for  
PT treating cancer, modulates the expression of a nucleic acid encoding  
PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.  
XX  
PS Claim 4; Page 152; 185pp; English.  
XX  
CC The invention relates to a novel short interfering RNA (siRNA) nucleic  
CC acid molecule or an enzymatic nucleic acid molecule, that modulates  
CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,  
CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic  
CC acid molecule of the invention has cytostatic, anti-HIV, and anti-  
CC rheumatic activity. The nucleic acid molecules are useful for reducing  
CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are  
CC also useful for treating breast, ovarian, colorectal, lung, prostate,  
CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences  
CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,  
CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human  
CC ribozymes of the invention  
XX  
SQ Sequence 17 BP; 1 A; 0 C; 2 G; 0 T; 14 U; 0 Other;  
  
Query Match 0.5%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 4.5e+03;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 2786 AAAAAAAAAAAAAAAAAA 2801  
Db 16 AAAAAAAAACAAAACAAA 1  
  
RESULT 5318  
ABZ65527/c  
ID ABZ65527 standard; RNA; 17 BP.  
XX  
AC ABZ65527;  
XX  
DT 21-MAR-2003 (first entry)  
XX  
DE Human HER2 DNazyme substrate #984.  
XX  
KW Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;  
KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;  
KW anti-rheumatic; cancer; AIDS; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO200297114-A2.  
XX  
PD 05-DEC-2002.  
XX  
PF 29-MAY-2002; 2002WO-US016840.  
XX  
PR 29-MAY-2001; 2001US-0294140P.  
PR 06-JUN-2001; 2001US-0296249P.  
PR 10-SEP-2001; 2001US-0318471P.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
XX  
PI Mcswiggen J;  
XX  
DR WPI; 2003-140484/13.  
XX  
PT Novel short interfering RNA and enzymatic nucleic acid useful for  
PT treating cancer, modulates the expression of a nucleic acid encoding  
PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.  
XX  
PS Claim 4; Page 152; 185pp; English.  
XX  
CC The invention relates to a novel short interfering RNA (siRNA) nucleic  
CC acid molecule or an enzymatic nucleic acid molecule, that modulates  
CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,  
CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic  
CC acid molecule of the invention has cytostatic, anti-HIV, and anti-  
CC rheumatic activity. The nucleic acid molecules are useful for reducing  
CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are  
CC also useful for treating breast, ovarian, colorectal, lung, prostate,  
CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences  
CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,  
CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human  
CC ribozymes of the invention  
XX  
SQ Sequence 17 BP; 0 A; 1 C; 2 G; 0 T; 14 U; 0 Other;  
  
Query Match 0.5%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 4.5e+03;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 2786 AAAAAAAAAAAAAAAAAA 2801  
Db 17 AAACAAACAAACAAA 2  
  
RESULT 5319  
AAZ59379  
ID AAZ59379 standard; DNA; 19 BP.  
XX  
AC AAZ59379;

QY 2786 AAAAAAAAAAAAAAAAAA 2801  
Db 16 AAAAAAAAACAAAACAAA 1  
  
RESULT 5318  
ABZ65527/c  
ID ABZ65527 standard; RNA; 17 BP.  
XX  
AC ABZ65527;  
XX  
DT 21-MAR-2003 (first entry)  
XX  
DE Human HER2 DNazyme substrate #984.  
XX  
KW Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;  
KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;  
KW anti-rheumatic; cancer; AIDS; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO200297114-A2.  
XX  
PD 05-DEC-2002.  
XX  
PF 29-MAY-2002; 2002WO-US016840.  
XX  
PR 29-MAY-2001; 2001US-0294140P.  
PR 06-JUN-2001; 2001US-0296249P.  
PR 10-SEP-2001; 2001US-0318471P.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
XX  
PI Mcswiggen J;  
XX  
DR WPI; 2003-140484/13.  
XX  
PT Novel short interfering RNA and enzymatic nucleic acid useful for  
PT treating cancer, modulates the expression of a nucleic acid encoding  
PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.  
XX  
PS Claim 4; Page 152; 185pp; English.  
XX  
CC The invention relates to a novel short interfering RNA (siRNA) nucleic  
CC acid molecule or an enzymatic nucleic acid molecule, that modulates  
CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,  
CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic  
CC acid molecule of the invention has cytostatic, anti-HIV, and anti-  
CC rheumatic activity. The nucleic acid molecules are useful for reducing  
CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are  
CC also useful for treating breast, ovarian, colorectal, lung, prostate,  
CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences  
CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,  
CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human  
CC ribozymes of the invention  
XX  
SQ Sequence 17 BP; 0 A; 1 C; 2 G; 0 T; 14 U; 0 Other;  
  
Query Match 0.5%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 4.5e+03;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 2786 AAAAAAAAAAAAAAAAAA 2801  
Db 17 AAACAAACAAACAAA 2  
  
RESULT 5319  
AAZ59379  
ID AAZ59379 standard; DNA; 19 BP.  
XX  
AC AAZ59379;

XX 05-APR-2000 (first entry)  
DT Forward PCR primer 3 for STP2 exon 1A sequencing.  
XX  
DE  
XX  
XX Single nucleotide polymorphism; SNP; STP2; phenol sulphotransferase;  
KW genotyping; human; drug metabolism; PCR primer; ss.  
KW  
XX Homo sapiens.  
OS  
XX WO9964630-A1;  
PN  
XX 16-DEC-1999.  
PD  
XX  
XX 09-JUN-1999; 99WO-US013094.  
PF  
XX 10-JUN-1998; 98US-0088710P.  
PR  
XX (AXYS-) AXYS PHARM INC.  
PA  
XX Guida M, Kurth J;  
PI  
XX WPI; 2000-105892/09.  
DR  
XX Novel nucleic acid used for genotyping, e.g. to predict rate of drug  
PT metabolism.  
PT  
XX  
XX Disclosure; Page 14; 46pp; English.  
PS  
XX This sequence represents a PCR primer used in the sequencing of the exon  
CC 1A region of human phenol sulphotransferase 2 (STP2). The invention  
CC relates to sequences AAZ59305-Z59352 which are fragments of the STP2  
CC gene. The fragments are from the 8 exons, the promoter region, 3' and 5'  
CC untranslated regions of the STP2 gene. Each of the sequences contains a  
CC newly identified STP2 gene single nucleotide polymorphism (SNP). STP2 is  
CC a phenol sulphotransferase. Substrates for STP2 include minoxidil,  
CC acetaminophen, and paracetamol. Several of the nucleotide changes  
CC identified at the polymorphism sites, give rise to an amino acid change.  
CC Amino acid changes may result in altered enzyme activity. The sequences  
CC can be used as probes for detecting STP2 polymorphisms. The polymorphic  
CC probes are used in screening and genotyping, i.e. to predict the rate of  
CC metabolism of STP2 substrates, potential drug-drug interactions and  
CC adverse side effects. They can also be used to detect diseases resulting  
CC from accidental or occupational exposure to toxins and to establish  
CC animal, cell or in vitro models for drug metabolism  
XX  
SQ Sequence 19 BP; 13 A; 1 C; 5 G; 0 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 12.8; DB 1; Length 19;  
Best Local Similarity 87.5%; Pred. No. 5.2e+03;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 2785 GAAAAAAGGAA 2800  
Db 3 GAAAAAAGGAA 18  
  
RESULT 5320  
ABZ92287/c  
ID ABZ92287 standard; DNA; 20 BP.  
XX  
XX ABZ92287;  
AC  
XX 17-OCT-2003 (first entry)  
DT  
XX Human oligonucleotide sequence.  
DE  
XX Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytosstatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.  
OS  
XX WO200285308-A2.  
PN  
XX 31-OCT-2002.  
PD  
XX 23-APR-2002; 2002WO-US013135.  
PF  
XX 24-APR-2001; 2001US-0286137P.  
PR  
XX (EPIG-) EPIGENESIS PHARM INC.  
PA  
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
PD WPI; 2003-229219/22.  
DR  
XX Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
PS Disclosure; SEQ ID NO 7529; 872pp; English.  
XX  
CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 0 A; 6 C; 0 G; 14 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 12.8; DB 1; Length 20;  
Best Local Similarity 87.5%; Pred. No. 5.4e+03;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 2785 GAAAAAAGGAA 2800  
Db 20 GAAAAAAGGAA 5  
  
RESULT 5321  
ABX12581/c  
ID ABX12581 standard; DNA; 20 BP.  
XX  
XX ABX12581;  
AC  
XX 10-MAY-2003 (first entry)  
DT  
XX Human cytochrome P450, CYP3AX, PCR primer #7.  
DE  
XX Human; cytochrome P450; CYP3AX; cancer; primer; ss.  
KW  
XX Homo sapiens.  
OS  
XX US2002160479-A1.  
PN  
XX

PD 31-OCT-2002.

XX 09-NOV-2001; 2001US-00007814.

PF 30-MAY-2000; 2000US-00583447.

XX (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.

XX Wojnowski L, Gellner K, Eiselt R;

PI WPI; 2003-288110/28.

XX New polynucleotide encoding a cytochrome P450 (CYP) 3A polypeptide, useful for diagnosing or treating disorders related to the expression of a molecular variant CYP3AX gene, e.g. cancer.

XX Example 3; Page 18; 52pp; English.

PS The invention relates to a polynucleotide which encodes a cytochrome P450 (CYP) 3AX polypeptide. The polynucleotide is useful in diagnosing or treating a disorder related to the expression of a molecular variant CYP3AX gene in a subject, such as cancer. It may also be used for identifying and obtaining drug candidates and inhibitors for therapy of disorders related to the malfunction of CYP3AX encoding genes. The present sequence represents a CYP3AX PCR primer of the invention

XX Sequence 20 BP; 7 A; 4 C; 4 G; 5 T; 0 U; 0 Other;

SQ Query Match 0.5%; Score 12.8; DB 1; Length 20;  
Best Local Similarity 87.5%; Pred. No. 5.4e+03;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 757 CATTTCATGACCAAG 772  
|||||

Db 20 CATTTCATGGCAAAG 5

RESULT 5322  
AAS03670/C

ID AAS03670 standard; DNA; 20 BP.

XX AAS03670;

AC AAS03670;

XX 29-AUG-2001 (first entry)

DT PCR primer re012, used to detect RHD positive haplotypes.

DE Rhesus box; RHD positive; sequence length polymorphism; SSP; RHD; SMP1;

XX RHCE; RHD negative; blood group typing; blood transfusion; antigen C;

KW haemolytic disease of the newborn; chromosome 1 p34.1-p36; primer; ss.

XX Homo sapiens.

OS WO200132702-A2.

XX 10-MAY-2001.

PD 31-OCT-2000; 2000WO-EP010745.

PF 02-NOV-1999; 99EP-00121686.

PR 31-MAY-2000; 2000EP-00111696.

XX (DRKB-) DRK BLUTSPENDEDIENST BADEN WUERTTEMBERG.

XX Flegel WA, Wagner FF;

PI WPI; 2001-291052/30.

XX New nucleic acid molecular structure, useful for detection of common RHD positive haplotypes in D-negative individuals, comprises RHD, SMP1 and RHCE genes.

XX Example 12; Page 66; 135pp; English.

PS

XX The sequence represents PCR primer re012, used to detect RHD positive haplotypes in RHD negative individuals. The primer was used in DNA typing using PCR-sequence length polymorphism (SSP) of the Rhesus genes locus comprising the RHD, SMP1 and RHCE (all undefined) genes and/or the Rhesus box(es), preferably the hybrid Rhesus box, the upstream Rhesus box and/or the downstream Rhesus box. The RHD and RHCE genes are located at chromosome 1 p34.1-p36. Rhesus box flanks the breakpoint region of the RHD deletion in the common RHD negative haplotypes. The primers of the invention are useful for: (1) the specific detection of the common RHD positive haplotypes in D-negative individuals; (2) blood group typing; (3) determining whether a patient can be transfused with Rhd negative blood and whether blood is suitable for transfusion to patients who should not be exposed to antigen C; (4) assessing the risk of a Rhd negative mother of conceiving or carrying an Rhd positive foetus. Anti-D antibodies are useful for treating pregnant women who are Rhesus D negative, where the foetus is not homozygous for the RHD gene to treat or prevent haemolytic disease of the newborn

XX Sequence 20 BP; 2 A; 11 C; 1 G; 6 T; 0 U; 0 Other;

SQ Query Match 0.5%; Score 12.8; DB 1; Length 20;  
Best Local Similarity 87.5%; Pred. No. 5.4e+03;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1037 GCCGGGAGGGGAAAG 1052  
|||||

Db 20 GCAGGGAGGTGGAAAG 5

RESULT 5323  
AAA94533

ID AAA94533 standard; DNA; 20 BP.

XX AAA94533;

AC AAA94533;

XX 09-JAN-2001 (first entry)

DT Antisense oligonucleotide #20973 targeted to human G-alpha-S1.

XX G-alpha-S1; infection; inflammation; tumour; antisense; human; phosphorothioate; 2'-methoxyethyl; MOE; 5-methylcytidine;

KW Gs-alpha short form; ss.

XX Homo sapiens.

OS Key Location/Qualifiers

XX modified\_base 1..20

FT /\*tag= a

FT /mod\_base= OTHER

FT /note= "Optionally the internucleotide linkages are phosphorothioate"

FT modified\_base 1..5

FT /\*tag= b

FT /mod\_base= OTHER

FT /note= "Optionally the nucleotides are 2'-methoxyethyl and cytidine residues are 5-methylcytidines"

FT modified\_base 16..20

FT /\*tag= c

FT /mod\_base= OTHER

FT /note= "Optionally the nucleotides are 2'-methoxyethyl and cytidine residues are 5-methylcytidines"

XX US6110664-A.

PN 29-AUG-2000.

XX 25-JUN-1999; 99US-00344914.

PF 25-JUN-1999; 99US-00344914.

XX (ISIS-) ISIS PHARM INC.

XX

PI Cowsert LM;  
XX WPI; 2000-586346/55.  
DR  
XX New antisense compounds for modulating the expression of G-alpha-S1,  
PT especially useful for diagnostics, therapeutics and prophylaxis, e.g. to  
PT prevent or delay infection, inflammation or tumor formation.  
XX  
XX Claim 3; Col 40; 37pp; English.  
XX  
XX The present invention relates to antisense compounds 8-30 bases long  
CC targeted to a coding region, a stop codon, or a 3' untranslated region of  
CC human G-alpha-S1 (see AA94451). The antisense compounds specifically  
CC hybridize with and inhibit the expression of human G-alpha-S1. The  
CC antisense compounds are useful for diagnostics, therapeutics and  
CC prophylaxis, e.g. to prevent or delay infection, inflammation or tumour  
CC formation. Particularly, the antisense oligonucleotides are useful for  
CC treating humans prone to a disease or condition associated with  
CC expression of G-alpha-S1. The present sequence an antisense  
CC oligonucleotide targeted to the 3' untranslated region of human G-alpha-  
CC S1  
XX  
SQ Sequence 20 BP; 2 A; 2 C; 1 G; 15 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 12.8; DB 1; Length 20;  
Best Local Similarity 87.5%; Pred. No. 5.4e+03;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 2268 TTATTTTCAGATGTTTC 2283  
Db 1 TTATTTTCATTTGTTTC 16  
  
RESULT 5324  
ABZ99084/c  
ID ABZ99084 standard; DNA; 20 BP.  
XX  
AC ABZ99084;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human PDE4C oligonucleotide sequence.  
XX  
KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
XX  
OS Homo sapiens.  
XX  
PN WO200285308-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013135.  
XX  
PR 24-APR-2001; 2001US-0286137P.  
XX  
PA (BPIG-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
DR WPI; 2003-229219/22.  
XX  
PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
PS Disclosure; SEQ ID NO 14326; 872pp; English.

XX  
CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 3 A; 2 C; 1 G; 14 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 12.8; DB 1; Length 20;  
Best Local Similarity 87.5%; Pred. No. 5.4e+03;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 2786 AAAAAAAAAAAAAAAAAA 2801  
Db 16 AAAAAATAAAAGAAAA 1  
  
RESULT 5325  
ABZ87697  
ID ABZ87697 standard; DNA; 20 BP.  
XX  
AC ABZ87697;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human oligonucleotide sequence.  
XX  
KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
XX  
OS Homo sapiens.  
XX  
PN WO200285308-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013135.  
XX  
PR 24-APR-2001; 2001US-0286137P.  
XX  
PA (EPIG-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
DR WPI; 2003-229219/22.  
XX  
PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
PS Disclosure; SEQ ID NO 2939; 872pp; English.



XX The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive, also  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 12 A; 3 C; 2 G; 3 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 12.8; DB 1; Length 20;  
Best Local Similarity 87.5%; Pred. No. 5.4e+03;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 2783 TTGAAAAAATAAAAAA 2798  
||| ||||| |||||  
Db 3 TTTAAAAAAACAAAA 18  
  
RESULT 5326  
AAV42066/c  
ID AAV42066 standard; DNA; 20 BP.  
XX  
AC AAV42066;  
XX 26-OCT-1998 (first entry)  
XX  
DE Mouse alpha 3 connexin wild-type gene 3' PCR primer.  
XX  
KW Alpha 3 connexin; A3C gene; mouse; lens; crystallin; cataract;  
KW knockout animal; PCR; primer; ss.  
XX  
OS Synthetic.  
OS Mus sp.  
XX  
PN WO9830677-A1.  
XX  
PD 16-JUL-1998.  
XX  
PF 09-JAN-1998; 98WO-US000340.  
XX  
PR 10-JAN-1997; 97US-0034737P.  
PR 15-MAY-1997; 97US-0046518P.  
XX  
PA (SCRI ) SCRIPPS RES INST.  
XX  
PI Gilula NB, Gong X, Kumar NM;  
XX  
DR WPI; 1998-413684/35.  
XX  
PT Disrupted alpha3 connexin genes - used to produce transgenic animals,  
PT useful for the study, prevention and treatment of cataracts.  
XX  
PS Example 1; Page 30; 73pp; English.  
XX  
CC 3 Primers were used to examine wild-type or mutant alleles of the alpha 3  
CC connexin gene (see AAV32687) in embryonic stem (ES) cells of putative  
CC alpha 3 connexin gene knockout mice. The 5' primer (see AAV42065) was  
CC used with a 3' primer (AAV42066) for detecting the wild-type allele or

CC with a 3' primer (see AAV42067) from the lacZ gene sequence to detect the  
CC alpha 3 gene disrupted allele. The absence of functional alpha 3 connexin  
CC protein (see AAV49009) in the knockout mice leads to age-related cataract  
CC formation. Such animals, or isolated lenses cultured in vitro, can be  
CC used in methods to identify compounds that affect cataract growth  
XX  
SQ Sequence 20 BP; 4 A; 4 C; 6 G; 6 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 12.8; DB 1; Length 20;  
Best Local Similarity 87.5%; Pred. No. 5.4e+03;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 737 ACAGTCATTCGCAAG 752  
||||| |||||  
Db 16 ACAGTCATCGGCAAG 1  
  
RESULT 5327  
AAF99576/c  
ID AAF99576 standard; DNA; 20 BP.  
XX  
AC AAF99576;  
XX 12-JUN-2001 (first entry)  
DT  
XX Immunostimulatory nucleic acid #692.  
DE  
XX Vaccine; cytostatic; virucidal; bactericidal; fungicidal; anti-parasitic;  
KW immunostimulatory; tumour; viral infection; bacterial infection;  
KW fungal infection; parasitic infection; cancer; asthma;  
KW infectious disease; allergy; immune deficiency; phosphorothioate; ss.  
XX  
OS Synthetic.  
XX  
PN WO200122972-A2.  
XX  
PD 05-APR-2001.  
XX  
PF 25-SEP-2000; 2000WO-US026383.  
XX  
PR 25-SEP-1999; 99US-0156113P.  
PR 27-SEP-1999; 99US-0156135P.  
PR 23-AUG-2000; 2000US-0227436P.  
XX  
PA (IOWA ) UNIV IOWA RES FOUND.  
PA (COLE-) COLEY PHARM GMBH.  
XX  
PI Krieg AM, Schetter C, Vollmer J;  
XX  
DR WPI; 2001-273485/28.  
XX  
PT Vaccinating against tumors, infectious diseases, allergies and asthma  
PT using immunostimulatory Py-rich and TG nucleic acids.  
XX  
PS Claim 101; Page 53; 338pp; English.  
XX  
CC The present invention relates to a method for stimulating an immune  
CC response. The method comprises administering an immunostimulatory nucleic  
CC acid to a non-rodent subject in sufficient quantity to stimulate an  
CC immune response. The present sequence is one such immunostimulatory  
CC nucleic acid. The immunostimulatory nucleic acids can be pyrimidine rich  
CC (py-rich) or thymidine (T) rich. The method is used to vaccinate subjects  
CC against tumour antigens, viral antigens (e.g. herpesviridae, retroviridae  
CC and/or orthomyxoviridae), bacterial antigens (e.g. toxoplasma,  
CC haemophilus, campylobacter, clostridium, Escherichia coli and/or  
CC staphylococcus), fungal antigens and/or parasitic antigens. The method is  
CC also useful for preventing cancer, asthma, infectious disease, allergy or  
CC immune deficiency. The present sequence can also be used to redirect a  
CC Th2 to a Th1 immune response and to activate immune cells. Note: the  
CC present sequence may have a phosphorothioate backbone  
XX  
SQ Sequence 20 BP; 13 A; 2 C; 2 G; 3 T; 0 U; 0 Other;

Query Match 0.5%; Score 12.8; DB 1; Length 20;  
Best Local Similarity 87.5%; Pred. No. 5.4e+03;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2179 TTTTAACTTTGA 2194  
| | | | | | | | | |  
Db 20 TTTTCAACGTGA 5

RESULT 5328  
ABS78292/c  
ID ABS78292 standard; DNA; 20 BP.  
XX  
AC ABS78292;  
XX  
DT 13-DEC-2002 (first entry)  
XX  
DE Angiogenesis inhibitory oligonucleotide #776.  
XX  
KW Angiogenesis inhibitor; ss; angiogenesis; solid tumour growth;  
KW tumour metastasis; precancerous lesion; rheumatoid arthritis; psoriasis;  
KW diabetic retinopathy; retinopathy of prematurity; macular degeneration;  
KW corneal graft rejection; neovascular glaucoma; retrolental fibroplasia;  
KW rubeosis; Osler-Webber Syndrome; myocardial angiogenesis;  
KW plaque neovascularisation; telangiectasia; haemophilic joint;  
KW angiofibroma; wound granulation; intestinal adhesion; atherosclerosis;  
KW scleroderma; hypertrophic scar.  
XX  
OS Synthetic.  
XX  
PN WO20253141-A2.  
XX  
PD 11-JUL-2002.  
XX  
PF 14-DEC-2001; 2001WO-US048458.  
XX  
PR 14-DEC-2000; 2000US-0255534P.  
XX  
PA (COLE-) COLEY PHARM GROUP INC.  
XX  
PI Bratzler RL;  
XX  
DR WPI; 2002-566690/60.  
XX  
PT Inhibiting angiogenesis in a subject, involves administering at least one  
PT antiangiogenic nucleic acid molecule to the subject.  
XX  
PS Claim 2; Page 33; 276pp; English.  
XX

The invention relates to inhibiting angiogenesis in a subject, comprising administering at least one antiangiogenic nucleic acid molecule. Also included is a kit comprising a first container housing the antiangiogenic nucleic acids, and instructions for administering them to a subject having a condition characterised by unwanted angiogenesis. The method is useful for inhibiting angiogenesis associated with solid tumour growth, tumour metastasis, precancerous lesion, rheumatoid arthritis, psoriasis, diabetic retinopathy, retinopathy of prematurity, macular degeneration, corneal graft rejection, neovascular glaucoma, retrolental fibroplasia, rubeosis, Osler-Webber Syndrome, myocardial angiogenesis, plaque neovascularisation, telangiectasia, haemophilic joints, angiofibroma, wound granulation, intestinal adhesions, atherosclerosis, scleroderma and hypertrophic scars. The present sequence is an antiangiogenic nucleic acid of the invention

Sequence 20 BP; 13 A; 2 C; 2 G; 3 T; 0 U; 0 Other;  
Query Match 0.5%; Score 12.8; DB 1; Length 20;  
Best Local Similarity 87.5%; Pred. No. 5.4e+03;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2179 TTTTAACTTTGA 2194  
| | | | | | | | | |  
Db 20 TTTTCAACGTGA 5

RESULT 5329  
ABL38654/c  
ID ABL38654 standard; DNA; 20 BP.  
XX  
AC ABL38654;  
XX  
DT 16-APR-2002 (first entry)  
XX  
DE Immunostimulatory nucleic acid SEQ ID NO: 9.  
XX  
KW Antibody-induced cell lysis; cancer; immunostimulatory; CD20;  
KW angiogenesis; metastasis; cytostatic; ss.  
XX  
OS Synthetic.  
XX  
PN WO200197843-A2.  
XX  
PD 27-DEC-2001.  
XX  
PF 22-JUN-2001; 2001WO-US020154.  
XX  
PR 22-JUN-2000; 2000US-0213346P.  
XX  
PA (IOWA ) UNIV IOWA RES FOUND.  
XX  
PI Weiner G, Hartmann G;  
XX  
DR WPI; 2002-154611/20.  
XX

Treating or preventing cancer, such as basal cell carcinoma, comprises administering immunostimulatory nucleic acids that induce expression of cell surface antigens and antibodies to a subject having or at risk of developing cancer.

Disclosure; Page 97; 312pp; English.

The present invention relates to methods for treating or preventing cancer, involving administering to a subject having or at risk of developing cancer immunostimulatory nucleic acids that induce expression of cell surface antigens and antibodies. The methods are useful for treating or preventing cancer such as basal cell carcinoma, bladder cancer, bone cancer, brain and central nervous system (CNS) cancer, breast cancer, cervical cancer, colon and rectum cancer, connective tissue cancer, oesophageal cancer, eye cancer, kidney cancer, larynx cancer, leukaemia, liver cancer, lung cancer, Hodgkin's lymphoma, non-Hodgkin's lymphoma, melanoma, myeloma, oral cavity cancer, ovarian cancer, pancreatic cancer, prostate cancer, rhabdomyosarcoma, skin cancer, stomach cancer, testicular cancer, and uterine cancer. The present sequence is an immunostimulatory oligonucleotide described in the exemplification of the invention

Sequence 20 BP; 13 A; 2 C; 2 G; 3 T; 0 U; 0 Other;  
Query Match 0.5%; Score 12.8; DB 1; Length 20;  
Best Local Similarity 87.5%; Pred. No. 5.4e+03;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2179 TTTTAACTTTGA 2194  
| | | | | | | | | |  
Db 20 TTTTCAACGTGA 5

RESULT 5330  
ABS70610/c  
ID ABS70610 standard; DNA; 20 BP.  
XX  
AC ABS70610;  
XX  
DT 25-NOV-2002 (first entry)  
XX  
DE Dendritic cell stimulating CpG oligodeoxynucleotide #99.

XX CpG; ss; dendritic cell; dendritic cell activation; cytostatic;  
KW antiallergic; cancer; immunotherapy; infectious disease; allergy.  
KW  
XX Synthetic.  
XX  
XX US6429199-B1.  
PN  
XX  
XX 06-AUG-2002.  
PD  
XX  
XX 13-NOV-1998; 98US-00191170.  
PF  
XX  
XX 15-JUL-1994; 94US-00276358.  
PR  
XX 07-FEB-1995; 95US-00386063.  
PR  
XX 30-OCT-1996; 96US-00738652.  
PR  
XX 30-OCT-1997; 97US-00960774.  
PR  
XX (IOWA ) UNIV IOWA RES FOUND.  
PA  
XX  
XX Krieg AM, Hartmann G;  
PI  
XX  
XX WPI; 2002-689667/74.  
DR  
XX  
XX Activating a dendritic cell for cancer immunotherapy or for treating  
PT infectious or allergy disease, by contacting a dendritic cell with an  
PT isolated nucleic acid containing at least one unmethylated CpG  
PT dinucleotide.  
PT  
XX  
XX Example 6; Col 34; 52pp; English.  
PS  
XX  
XX This invention relates to a novel method for activating or causing  
CC maturation of a dendritic cell. The method comprises contacting a  
CC dendritic cell with an isolated nucleic acid containing at least one  
CC unmethylated CpG dinucleotide in an amount effective to activate or cause  
CC maturation of the dendritic cell, where the activation is performed ex  
CC vivo. The method of the invention may have cytostatic or antiallergic  
CC activities. The method of the invention is useful for cancer  
CC immunotherapy or for treating an infectious disease or allergy, by  
CC administering an activated dendritic cell that express a specific cancer,  
CC microbial or allergy causing antigen, to a subject having a cancer  
CC including the cancer antigen, to a subject having an infection with a  
CC microorganism including the microbial antigen or to a subject having an  
CC allergic reaction to the allergy causing antigen, where the activated  
CC dendritic cell is prepared using the method of the invention. The method  
CC is useful for generating a high yield of dendritic cells by administering  
CC an isolated nucleic acid containing at least one unmethylated CpG  
CC dinucleotide, where the nucleic acid is 8-80 bases in length in an amount  
CC effective to activate the dendritic cells to a subject, and isolating  
CC dendritic cells from the subject. The use of CpG allows the generation of  
CC mature dendritic cells from peripheral blood within two days in a well  
CC defined system. The application of CpG for this purpose is superior to  
CC granulocyte macrophage-colony stimulating factor (GM-CSF), which is  
CC currently used for this purpose. CpG oligonucleotides have a longer half  
CC life, are less expensive, and show a greater magnitude of immune effects.  
CC The present sequence represents a CpG oligonucleotide used in the method  
CC of the invention  
XX  
SQ Sequence 20 BP; 13 A; 2 C; 2 G; 3 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 12.8; DB 1; Length 20;  
Best Local Similarity 87.5%; Pred. No. 5.4e+03;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 2179 TTTT TTTT TTAAC TTTTGA 2194  
Db ||||| ||||| |||||  
20 TTTT TTTT CAAC GTTGA 5  
  
RESULT 5331  
ACH03114/c  
ID ACH03114 standard; DNA; 20 BP.  
XX  
AC ACH03114;

XX 25-SEP-2003 (first entry)  
DT Immunostimulatory nucleic acid #749.  
XX  
DE  
XX Immunostimulatory; antiinflammatory; dermatological; antipsoriatic;  
KW antitumor; gene therapy; vaccine; non-allergic inflammatory disease;  
KW psoriasis; eczema; allergic contact dermatitis; latex dermatitis;  
KW inflammatory bowel disease; ulcerative colitis; Crohn's disease; ss.  
XX  
OS Synthetic.  
XX  
XX US2003050268-A1.  
PN  
XX 13-MAR-2003.  
PD  
XX 29-MAR-2002; 2002US-00112653.  
PF  
XX 29-MAR-2001; 2001US-0279642P.  
PR  
XX (KRIE/) KRIEG A M.  
PA (BERG/) BERG D J.  
PA  
XX Krieg AM, Berg DJ;  
PI  
XX WPI; 2003-521815/49.  
DR  
XX Treating non-allergic inflammatory diseases, such as psoriasis, eczema,  
PT allergic contact dermatitis, latex dermatitis or inflammatory bowel  
PT disease by administering an immunostimulatory nucleic acid.  
PT  
XX Disclosure; Page 29; 229pp; English.  
PS  
XX The invention describes a method of treating non-allergic inflammatory  
CC disease comprising administering to a subject having or at risk of  
CC developing a non-allergic inflammatory disease an immunostimulatory  
CC nucleic acid for prevention or treatment of the disease. The method is  
CC useful for treating non-allergic inflammatory diseases, such as  
CC psoriasis, eczema, allergic contact dermatitis, latex dermatitis or  
CC inflammatory bowel disease e.g., ulcerative colitis or Crohn's disease.  
CC This sequence represents an immunostimulatory nucleic acid  
XX  
SQ Sequence 20 BP; 13 A; 2 C; 2 G; 3 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 12.8; DB 1; Length 20;  
Best Local Similarity 87.5%; Pred. No. 5.4e+03;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 2179 TTTT TTTT TTAAC TTTTGA 2194  
Db ||||| ||||| |||||  
20 TTTT TTTT CAAC GTTGA 5  
  
RESULT 5332  
ADB37078/c  
ID ADB37078 standard; DNA; 20 BP.  
XX  
XX ADB37078;  
XX  
DT 04-DEC-2003 (first entry)  
XX  
DE Immunostimulatory nucleic acid #692.  
XX  
KW ds; allergy; asthma; poly-G nucleic acid; aerosol formulation;  
KW hypo-responsive subject; immunostimulatory.  
XX  
OS Synthetic.  
XX  
XX US2003087848-A1.  
PN  
XX 08-MAY-2003.  
PD  
XX 02-FEB-2001; 2001US-00776479.  
PF

XX PR 03-FEB-2000; 2000US-0179991P.  
XX (BRAT/) BRATZLER R L.  
PA (PETE/) PETERSEN D M.  
PA (FOUR/) FOURON Y.  
XX Bratzler RL, Petersen DM, Fouron Y;  
PI WPI; 2003-657977/62.  
XX Treating and/or preventing allergy or asthma using an immunostimulatory  
PT nucleic acid alone or in combination with an asthma/allergy medicament.  
XX Disclosure; Page 16; 221pp; English.  
XX The invention relates to a method of treating or preventing allergy or  
CC asthma which comprises administering to a subject a poly-G nucleic acid  
CC in an aerosol formulation. The methods and compositions of the present  
CC invention are useful for diagnosing and/or treating asthma and allergy  
CC especially in a hypo-responsive subject. The present sequence represents  
CC an immunostimulatory nucleic acid of the invention.  
XX Sequence 20 BP; 13 A; 2 C; 2 G; 3 T; 0 U; 0 Other;  
SQ Query Match 0.5%; Score 12.8; DB 1; Length 20;  
Best Local Similarity 87.5%; Pred. No. 5.4e+03;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 2179 TTTT TTTT TTAAC TTTGA 2194  
Db ||||| ||||| |||||  
20 TTTT TTTT CAACG TTTGA 5  
RESULT 5333  
AAD60260/c  
ID AAD60260 standard; DNA; 20 BP.  
XX AAD60260;  
AC AAD60260;  
XX 18-DEC-2003 (first entry)  
DT Oligonucleotide 1638 used for activating dendritic cells.  
XX Dendritic cell activation; cancer immunotherapy; infectious disease;  
KW allergy; cell therapy; ss.  
XX Unidentified.  
OS US2003100527-A1.  
XX 29-MAY-2003.  
PD 03-JUN-2002; 2002US-00161229.  
XX 15-JUL-1994; 94US-00276358.  
PR 07-FEB-1995; 95US-00386063.  
PR 30-OCT-1996; 96US-00738652.  
PR 30-OCT-1997; 97US-00960774.  
PR 13-NOV-1998; 98US-00191170.  
XX (IOWA ) UNIV IOWA RES FOUND.  
PA Krieg AM, Hartmann G;  
XX WPI; 2003-708674/67.  
DR Activating a dendritic cell useful for treating cancer, infectious  
XX diseases or allergies, comprises contacting the dendritic cell with an  
PT amount of an isolated nucleic acid that contains at least one  
PT un methylated CpG dinucleotide.  
XX Disclosure; Page 11; 51pp; English.  
PS

XX CC The invention relates to a method of activating a dendritic cell. The  
CC method involves contacting the dendritic cell with an isolated nucleic  
CC acid containing at least one unmethylated CpG dinucleotide, where the  
CC nucleic acid is about 8-80 bases in length, in an amount that activates  
CC the dendritic cell. The compositions and methods of the invention are  
CC useful for cancer immunotherapy, or for treating an infectious disease  
CC (e.g. viral, bacterial or fungal infections) or allergy. The invention is  
CC useful in cell therapy. The present sequence is an oligonucleotide used  
CC for activating dendritic cells  
XX Sequence 20 BP; 13 A; 2 C; 2 G; 3 T; 0 U; 0 Other;  
SQ Query Match 0.5%; Score 12.8; DB 1; Length 20;  
Best Local Similarity 87.5%; Pred. No. 5.4e+03;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 2179 TTTT TTTT TTAAC TTTGA 2194  
Db ||||| ||||| |||||  
20 TTTT TTTT CAACG TTTGA 5  
RESULT 5334  
AAH91826/c  
ID AAH91826 standard; DNA; 21 BP.  
XX AAH91826;  
AC AAH91826;  
XX 09-OCT-2001 (first entry)  
DT Human inflammatory bowel disease associated polymorphic site #901.  
XX Human; inflammatory bowel disease; Crohn's disease; ulcerative colitis;  
KW single nucleotide polymorphism; SNP; chromosome 19p13; paternity test;  
KW chromosome 5q31-33; forensic test; gene therapy; ds.  
XX Homo sapiens.  
XX Key Location/Qualifiers  
FH misc\_feature 9 /\*tag= a  
FT /note= "SNP, optionally T or A at this position"  
FT WO200142511-A2.  
XX 14-JUN-2001.  
XX 11-DEC-2000; 2000WO-US033632.  
XX 10-DEC-1999; 99US-0170257P.  
PR 10-APR-2000; 2000US-0196046P.  
XX (WHED ) WHITEHEAD INST BIOMEDICAL RES.  
PA (ELLI-) ELLIPSIS BIOTHERAPEUTICS CORP.  
XX Daly M, Hudson TJ, Lander ES, Rioux J, Siminovitch K;  
PI WPI; 2001-367874/38.  
XX Testing for the presence of polymorphisms associated with inflammatory  
PT bowel disease, using a hybridization assay.  
XX Claim 1; Page 76; 463pp; English.  
XX The present invention describes a method for detecting the presence of  
CC polymorphisms associated with inflammatory bowel diseases such as  
CC ulcerative colitis and Crohn's disease. The methods can be used to detect  
CC the presence of genetic polymorphisms associated with inflammatory bowel  
CC disease and correlating their occurrence with disease states. They may be  
CC used in this way for phenotypic correlations, forensics, paternity  
CC testing, medicine and genetic analysis. The present sequence is a  
CC polymorphic site described in the exemplification of the invention  
XX



SQ Sequence 21 BP; 1 A; 3 C; 0 G; 16 T; 0 U; 1 Other;

Query Match 0.5%; Score 12.8; DB 1; Length 21;  
Best Local Similarity 82.4%; Pred. No. 5.6e+03;  
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2786 AAAAAAAAAAAAAAAAAA 2802  
|||||  
Db 21 AAAAAAAAAAANGAGA 5

RESULT 5335  
AAZ75372/C  
ID AAZ75372 standard; DNA; 21 BP.  
XX  
AC AAZ75372;  
XX  
DT 10-SEP-2001 (first entry)  
XX  
DE Human biallelic marker downstream amplification primer SEQ ID NO:9728.  
XX  
KW Human genome; biallelic marker; high density disequilibrium map;  
KW genomic map; haplotype; phenotype; polymorphic base; genotyping;  
KW haplotyping; hybridisation; identification; characterisation;  
KW amplification; single nucleotide polymorphism; SNP; PCR primer;  
KW diagnosis; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO9954500-A2.  
XX  
PD 28-OCT-1999.  
XX  
PF 21-APR-1999; 99WO-IB000822.  
XX  
PR 21-APR-1998; 98US-0082614P.  
PR 23-NOV-1998; 98US-0109732P.  
XX  
PA (GEST ) GENSET.  
XX  
PI Cohen D, Blumenfeld M, Chumakov I;  
XX  
XX  
DR WPI; 2000-013267/01.  
XX  
PT Novel biallelic markers used to construct a high density disequilibrium  
PT map of the human genome.  
XX  
PS Claim 8; Page 2304; 2745pp; English.  
XX  
CC AAZ65654 to AAZ69578 represent human biallelic markers from the present  
CC invention, which contain a polymorphic base at position 24 of their  
CC nucleotide sequences. AAZ69579 to AAZ77440 represent amplification  
CC primers for the biallelic markers. The biallelic markers of the invention  
CC have a variety of uses: they can be used for high density mapping of the  
CC human genome, and in complex association studies and haplotyping studies  
CC which are useful in determining the genetic basis for disease states.  
CC Compositions and methods of the invention can also be useful for the  
CC identification of the targets for the development of pharmaceutical  
CC agents and diagnostic methods, as well as the characterisation of the  
CC differential efficacious responses to and side effects from  
CC pharmaceutical agents acting on a disease as well as other treatment.  
CC N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and  
CC 3367, are not actually given a sequence in the Sequence Listing from the  
CC present invention  
XX  
SQ Sequence 21 BP; 0 A; 7 C; 0 G; 14 T; 0 U; 0 Other;

Query Match 0.5%; Score 12.8; DB 1; Length 21;  
Best Local Similarity 87.5%; Pred. No. 5.6e+03;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2785 AAAAAAAAAAAAAAAAAA 2800  
|||||

Db 21 GAAGGAAAAAAAAAAAA 6

RESULT 5336  
AAC83568  
ID AAC83568 standard; DNA; 23 BP.  
XX  
AC AAC83568;  
XX  
DT 28-FEB-2001 (first entry)  
XX  
DE Human FMR1 gene 5' untranslated region partial sequence SEQ ID NO: 3.  
XX  
KW Human; FMR1; FMRP; Fragile X syndrome; methylation; diagnosis;  
KW chromosome Xq27.3; ds.  
XX  
OS Homo sapiens.  
XX  
PN US6143504-A.  
XX  
PD 07-NOV-2000.  
XX  
PF 27-OCT-1999; 99US-00429499.  
XX  
PR 27-OCT-1999; 99US-00429499.  
XX  
PA (ARCH-) ARCH DEV CORP.  
XX  
PI Das S, Ledbetter DH;  
XX  
DR WPI; 2001-006432/01.  
XX  
PT Determining methylation state of FMR1 gene promoter for diagnosing  
PT fragile X syndrome in males involves denaturing DNA sample, subjecting  
PT DNA to bisulfite modification, amplifying DNA and detecting products.  
XX  
PS Example 2; Fig 1; 20pp; English.  
XX  
CC The present invention describes a novel method of diagnosing Fragile X  
CC syndrome using a PCR-based method of methylation analysis. The FMR1 gene  
CC promoter, located at chromosome Xq27.3, is composed of a CGG  
CC trinucleotide repeat. The expansion of this repeat leads to a premutation  
CC and then a full mutation, the latter of which is likely to cause the  
CC methylation of a nearby CpG island, causing the Fragile X syndrome  
CC phenotype. This method is useful in the design of appropriate therapies  
CC and counselling for affected individuals and carriers  
XX  
SQ Sequence 23 BP; 1 A; 14 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.5%; Score 12.8; DB 1; Length 23;  
Best Local Similarity 87.5%; Pred. No. 5.8e+03;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 410 GCGTACGCCCGCCCA 425  
||| |||||  
Db 1 GCGCCCGCCCGCCCA 16

RESULT 5337  
AAH28300/C  
ID AAH28300 standard; RNA; 23 BP.  
XX  
AC AAH28300;  
XX  
DT 05-SEP-2001 (first entry)  
XX  
DE 3' untranslated region sequence from neuronal cadherin gene.  
XX  
KW mRNA protein complex; tumour development; cell aging; death;  
KW ribonomic profile; RNA-binding protein; ss.  
XX  
OS Unidentified.

PN WO200148480-A1.  
XX  
PD 05-JUL-2001.  
XX  
PF 28-DEC-2000; 2000WO-US035583.  
XX  
PR 28-DEC-1999; 99US-0173338P.  
XX  
PA (KEEN/) KEENE J D.  
XX  
PI Keene JD, Tenenbaum SA, Carson C;  
XX  
PI WPI; 2001-425706/45.  
DR  
XX  
XX Partitioning endogenous mRNA-protein complexes in vivo, by contacting  
PT sample comprising the complex with ligand that binds to a component of  
PT the complex and separating complex by binding ligand with a binding  
PT molecule.  
XX  
PS Example 6; Page 31; 49pp; English.  
XX  
CC The specification describes a method for partitioning endogenous cellular  
CC mRNA-protein (mRNP) complexes. The method comprises contacting a  
CC biological sample comprising mRNP complex with ligand that specifically  
CC binds a component of mRNP complex, separating mRNP complex by binding the  
CC ligand with a molecule specific for ligand, which is attached to the  
CC solid support and then collecting the mRNP complex by removing the  
CC complex from the support. The method is useful for in vivo partitioning  
CC of cellular mRNA protein complexes in a biological sample. The method is  
CC useful for determining the ribonomic profile of a cell which has numerous  
CC uses including monitoring of tumour development, state of growth or state  
CC of development, perturbations of a biological system such as disease,  
CC drug or toxin treatment and the state of cell aging or death,  
CC distinguishing ribonomic profiles among organisms, to discriminate  
CC between transcriptional and post-transcriptional contributions to gene  
CC expression and to track the movement of RNAs through RNP complexes,  
CC including the interactions of combinations of proteins with RNAs in RNP  
CC complexes. AAH28281-AAH28316 represent sequences derived from the 3'  
CC untranslated region (UTR) of mRNA of various genes. The sequences contain  
CC target sequences for RNA-binding proteins  
XX  
SQ Sequence 23 BP; 4 A; 0 C; 0 G; 0 T; 19 U; 0 Other;  
  
Query Match 0.5%; Score 12.8; DB 1; Length 23;  
Best Local Similarity 87.5%; Pred. No. 5.8e+03;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 2786 AAAAAAAAAAAAAAAAAA 2801  
Db | | | | | | | | | | | | | | | |  
23 AAAAAAAAAATTAAAAAA 8  
  
RESULT 5338  
ID ABT05505  
XX  
AC ABT05505 standard; DNA; 23 BP.  
XX  
XX ABT05505;  
DT 11-OCT-2002 (first entry)  
XX  
DE NOVX related probe SEQ ID No 179.  
XX  
KW Cytostatic; antidiabetic; anorectic; metabolic; nootropic; antilipaemic;  
KW neuroprotective; antiparkinsonian; anticonvulsant; cerebroprotective;  
KW tranquiliser; neuroleptic; antidiabetic; antiulcer; antiinflammatory;  
KW anti-HIV; antiallergic; antirheumatic; antiarthritic; NOVX; diabetes;  
KW metabolic disorder; obesity; infectious disease; Alzheimer's disease;  
KW anorexia; neurodegenerative disorder; Parkinson's disorder; obesity;  
KW immune disorder; haematopoietic disorder; dyslipidaemia; chronic disease;  
KW metabolic syndrome X; wasting disorder; cancer; neurological disorder;  
KW epilepsy; stroke; mental disorder; schizophrenic disorders; goiter;  
KW vesicular transport; cystic fibrosis; gastrointestinal disorder;  
KW diabetes mellitus; ulcerative colitis; AIDS; allergic reaction;

KW multiple sclerosis; rheumatoid arthritis; transgenic animal;  
KW gene therapy; probe; ss.  
XX  
OS Unidentified.  
XX  
PN WO200246409-A2.  
XX  
PD 13-JUN-2002.  
XX  
PF 06-DEC-2001; 2001WO-US046586.  
XX  
PR 06-DEC-2000; 2000US-0251660P.  
PR 12-DEC-2000; 2000US-0255029P.  
PR 08-JAN-2001; 2001US-0260326P.  
PR 24-JAN-2001; 2001US-0263800P.  
PR 20-FEB-2001; 2001US-0269942P.  
PR 24-APR-2001; 2001US-0286183P.  
PR 20-AUG-2001; 2001US-0313627P.  
PR 12-SEP-2001; 2001US-0318712P.  
XX  
PA (CURA-) CURAGEN CORP.  
XX  
PI Guo X, Li L, Patturajan M, Shimkets RA, Casman SJ, Malyankar UM;  
PI Tchernev VT, Vernet CAM, Spytek KA, Shenoy SG, Alsobrook JP;  
PI Edinger S, Peyman JA, Stone DJ, Ellerman K, Gangolli EA, Boldog FL;  
PI Colman SD, Eisen AJ, Liu X, Padigaru M, Spaderna SK, Zerhusen BD;  
XX  
DR WPI; 2002-547774/58.  
XX  
PT Novel isolated polypeptide, designated NOVX, useful for treating or  
PT preventing cancer, diabetes, obesity, dyslipidemia, anorexia, and  
PT metabolic, neurodegenerative, immune and hematopoietic disorders.  
XX  
PS Example 2; Page 274; 421pp; English.  
XX  
CC The invention relates to an isolated polypeptide, designated NOVX,  
CC comprising a sequence fully defined in the specification. The isolated  
CC protein, its encoding polynucleotide or an antibody created from the  
CC protein is useful in the manufacture of a medicament for treating a  
CC syndrome associated with a human disease, preferably a NOVX-associated  
CC disorder, or for treating or preventing a NOVX-associated disorder in a  
CC subject, preferably human. The isolated protein, its encoding  
CC polynucleotide or an antibody created from the protein are also useful  
CC for treating or preventing metabolic disorders, diabetes, obesity,  
CC infectious disease, anorexia, neurodegenerative disorder, Alzheimer's  
CC disease, Parkinson's disorder, immune disorders, haematopoietic  
CC disorders, and various dyslipidaemias, metabolic disturbances associated  
CC with obesity, the metabolic syndrome X, wasting disorders associated with  
CC chronic diseases, and cancer. The isolated protein, its encoding  
CC polynucleotide or an antibody created from the protein are useful for  
CC treating or preventing neurological disorders such as epilepsy, stroke,  
CC mental disorders including mood, anxiety, schizophrenic disorders,  
CC disorders of vesicular transport such as cystic fibrosis, diabetes  
CC mellitus, goiter, gastrointestinal disorders including ulcerative  
CC colitis, other conditions associated with abnormal vesicle trafficking  
CC including AIDS, allergic reactions, multiple sclerosis and rheumatoid  
CC arthritis. A cell comprising the vector of the invention is useful for  
CC producing non-human transgenic animals. The polynucleotide of the  
CC invention can be used to treat disorders by gene therapy. This  
CC polynucleotide sequence represents a probe of a sequence relating to the  
CC NOVX proteins of the invention  
XX  
SQ Sequence 23 BP; 5 A; 10 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.5%; Score 12.8; DB 1; Length 23;  
Best Local Similarity 87.5%; Pred. No. 5.8e+03;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 1398 CCCTGCAGACTACAT 1413  
| | | | | | | | | | | | | | | |  
Db 5 CCCTGCAGCACCACAT 20

RESULT 5339  
AAS20313/c  
ID AAS20313 standard; DNA; 25 BP.  
XX  
AC AAS20313;  
XX  
DT 23-APR-2002 (first entry)  
XX  
DE Human Cgamma gene Cgamma1-hinge intron PCR primer 25657.  
XX  
DE Human; ss; Cgamma; intron Cgamma-hinge; RCA; SP; LEX; RCB; 25657;  
KW antibody; phage display; scFv; T-cell receptor; TCR; PCR primer.  
XX  
OS Homo sapiens.  
OS Synthetic.  
XX  
PN WO200192291-A2.  
XX  
PD 06-DEC-2001.  
XX  
PF 30-MAY-2001; 2001WO-IL000496.  
XX  
PR 30-MAY-2000; 2000IL-00136459.  
XX  
PA (GALI-) GALIM-GALIL IMMUNOLOGY LTD.  
XX  
PI Gross G, Schlesinger Y;  
XX  
DR WPI; 2002-114322/15.  
XX  
PT Novel DNA construct for creating immune antibody and T-cell receptor  
PT libraries, consists of transcription unit comprising promoter/enhancer  
PT elements and template encoding RNA transcript.  
XX  
PS Example 3d; Page 48; 94pp; English.  
XX  
CC The invention relates to a DNA construct consisting of a transcription  
CC unit useful for covalent intracellular joining of selected exons from  
CC transcripts of two different Genes A and B in a cell in which the Genes A  
CC and B are expressible, where the transcription unit comprises promoter/  
CC enhancer elements and a template for RNA synthesis which encodes an RNA  
CC transcript. The RNA transcript has the formula : RCA-SP-RCB. RCA =  
CC nucleotide segment having one or more sequences, each reverse-  
CC complementary to one or more sequences of pre-mRNA of gene A and genes  
CC related to it, where the sequences of pre-mRNA of gene A and genes  
CC related to it are situated downstream to an exon selected to be spliced  
CC to pre-mRNA of gene B or genes related to it; SP = either a spacer  
CC sequence or SP1-LEX-SP2; SP1 and SP2 = spacer sequences; LEX = an exon  
CC encoding a flexible peptide linker or its part preceded by branch point  
CC and acceptor splice sequences and followed by a donor splice sequence;  
CC and RCB = nucleotide segment having one or more sequences, each reverse-  
CC complementary to one or more sequences of pre-mRNA of gene B and genes  
CC related to it, where the sequences of pre-mRNA of gene B and genes  
CC related to it are situated upstream to an exon in pre-mRNA of gene B or  
CC genes related to it selected to be spliced to the selected exon of gene  
CC A. The DNA construct is useful for constructing a mouse or human antibody  
CC library. A transgenic non-human animal harbouring the construct is useful  
CC for generating a variegated population of cDNA and double-stranded DNA  
CC molecules suitable for preparation of gene libraries encoding scFv  
CC molecules of antibodies or human T-cell receptors (TCRs) of interest. The  
CC construct is useful for generating a human TCR library, preferably a  
CC phage-display library, comprising a variegated population of scFv  
CC molecules of human TCRs of interest expressed and displayed on the  
CC surface of a cell or viral particle. The transgenic animal is useful for  
CC generating an antibody library comprising a variegated population of scFv  
CC molecules of antibodies of interest expressed and displayed on the  
CC surface of a cell or viral particle. The construct is useful for  
CC intracellular functional joining of antibody heavy and light chain genes  
CC in antibody-producing cells, and for the production of invaluable  
CC reagents in medicine, diagnostic research and industry. The construct  
CC allows the faithful reconstitution of entire antibody immune repertoires  
CC in-vitro as libraries of scFvs displayed on phage or other display units,  
CC and such a capacity combines the extraordinary ability of the immune

CC system to produce specific, high affinity antibodies in response to  
CC antigen, with the fast and easy protocols of in-vitro display  
CC technologies. The present sequence amplifies a fragment from the human  
CC Cgamma gene being a region of the Cgamma1-hinge intron predicted to  
CC contain the branch point and peptide linker sequence  
XX  
SQ Sequence 25 BP; 5 A; 7 C; 13 G; 0 T; 0 U; 0 Other;  
XX  
Query Match 0.5%; Score 12.8; DB 1; Length 25;  
Best Local Similarity 70.8%; Pred. No. 5.7e+03;  
Matches 17; Conservative 0; Mismatches 7; Indels 0; Gaps 0;  
QY 543 CCCACCTCTCCGGGCTGGAGGCGG 566  
DB 25 CCTCCCTCCCTGTGCTGGCGGCCG 2  
RESULT 5340  
ABK90953/c  
ID ABK90953 standard; DNA; 25 BP.  
XX  
AC ABK90953;  
XX  
DT 05-NOV-2002 (first entry)  
XX  
DE PCR primer, 25657, used to amplify human C gamma CH1-hinge intron.  
XX  
KW Human; PCR; primer; ss; antiHIV; chimeric protein; HIV-1;  
KW human immunodeficiency virus-1; envelope glycoprotein; env; gp120; CD4;  
KW cellular receptor; immunoglobulin; Ig; V1; V2; variable region;  
KW variable region-like membrane distal domain; antibody; heavy chain; VH;  
KW VH3; gene therapy; HIV infection; virus replication; constant gamma;  
KW C gamma; CH1-hinge; CH1.  
XX  
OS Homo sapiens.  
XX  
PN WO200259258-A2.  
XX  
PD 01-AUG-2002.  
XX  
PF 22-JAN-2002; 2002WO-IL000060.  
XX  
PR 22-JAN-2001; 2001IL-00141023.  
XX  
PA (GAVI-) GAVISH-GALILEE BIO APPL LTD.  
XX  
PI Gross G, Meyuhas R;  
XX  
DR WPI; 2002-608450/65.  
XX  
PT New nucleic acid molecule encoding chimeric proteins with binding  
PT specificity for a site on HIV envelope glycoprotein gp120 and a site on  
PT gp120 protein or on the extracellular portion of human CD4, for  
PT preventing or treating HIV infection.  
XX  
PS Example 1; Page 23; 48pp; English.  
XX  
CC The invention discloses a nucleic acid molecule encoding a functional  
CC chimeric protein with binding specificity for at least two different  
CC sites. At least one site is on the human immunodeficiency virus-1 (HIV-1)  
CC envelope glycoprotein (env), gp120, and the other site is either on the  
CC gp120 protein or on the extracellular portion of human CD4, the major  
CC cellular receptor for HIV. The chimeric protein essentially comprises a  
CC first binding region of a soluble extracellular portion of human CD4,  
CC consisting of the immunoglobulin (Ig) variable region-like membrane  
CC distal domains (V1 and V2) and a second binding region of a variable  
CC region of an antibody heavy chain (VH), encoded by the VH3 gene, which is  
CC capable of being attached to an adjacent and non-overlapping site on the  
CC gp120 protein, or to a site on the extracellular portion of human CD4,  
CC and is capable of increasing the capacity of the extracellular portion of  
CC human CD4 to interact with gp120 and to block the interaction of HIV with  
CC membranaral CD4. These two binding regions are physically connected by a  
CC linker region. The chimeric protein of the invention is useful for gene



CC therapy and for preventing and treating an HIV infection and for  
CC neutralising and inhibiting virus replication and infectivity in a  
CC subject, preferably a mammal. The sequence presented is the PCR primer,  
CC 25657, which was used to amplify the human constant (C) gamma heavy chain  
CC domain, CH1, gene of the Ig chain used in the construction of the  
CC chimeric protein  
XX  
SQ Sequence 25 BP; 5 A; 7 C; 13 G; 0 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 12.8; DB 1; Length 25;  
Best Local Similarity 70.8%; Pred. No. 5.7e+03;  
Matches 17; Conservative 0; Mismatches 7; Indels 0; Gaps 0;  
  
QY 543 CCCACCTCTCCGGGCTGGAGGCGG 566  
Db 25 CCTCCCTCCCTGCTGCTGGCGCGG 2  
  
RESULT 5341  
ACI27529/C  
ID ACI27529 standard; DNA; 25 BP.  
XX  
AC ACI27529;  
XX  
DT 13-OCT-2003 (first entry)  
XX  
DE Human microarray DNA oligonucleotide SEQ ID NO 27520.  
XX  
KW EST; ss; probe; expressed sequence tag; microarray; gene expression;  
KW genetic variation; biallelic marker; polymorphism; human;  
KW cross-species comparison.  
XX  
OS Homo sapiens.  
XX  
PN US2003104410-A1.  
XX  
PD 05-JUN-2003.  
XX  
PF 15-MAR-2002; 2002US-00098263.  
XX  
PR 16-MAR-2001; 2001US-0276759P.  
XX  
PA (AFFY-) AFFYMETRIX INC.  
XX  
PI Mittmann MP;  
XX  
DR WPI; 2003-567953/53.  
XX  
PT New array of nucleic acid probes, useful for in situ hybridization, in  
PT Southern, Northern or dot-blot hybridization to identify or detect the  
PT sequence or specific mutations of any gene.  
XX  
PS Claim 1; SEQ ID NO 27520; 9pp; English.  
XX  
CC The invention discloses a microarray comprising a plurality of nucleic  
CC acid probes including one of 2,018,500 fully defined sequences, or its  
CC perfect match, perfect mismatch, antisense match or antisense mismatch.  
CC Also disclosed is a method of gene expression analysis. The array is used  
CC in monitoring gene expression levels by hybridisation to a DNA library,  
CC in analysis of genetic variation or in hybridisation of tag-labelled  
CC compounds. The nucleic acid probes are specifically designed for analysis  
CC of at least one target sequence. The method of analysis comprises  
CC hybridising at least one or more nucleic acids to at least two or more  
CC nucleic acid probes and detecting the hybridisation. The nucleic acid  
CC probes are attached to a solid support. The analysis comprises monitoring  
CC gene expression levels, identifying biallelic markers or polymorphisms,  
CC or family members of a gene and a cross-species comparison. Each of the  
CC nucleic acids further comprises a tag sequence. The array of nucleic acid  
CC probes is useful in in situ hybridisation, in Southern, Northern or dot-  
CC blot hybridisation to identify or detect the sequence or specific  
CC mutations of any gene, in mapping the 5' termini of mRNA molecules by  
CC primer extensions or in screening cDNA or genomic libraries or subclones  
CC for additional subclones containing segments of DNA that have been

CC isolated and previously sequenced. The sequence presented is one of the  
CC nucleic acid probes incorporated in the microarray. Note: The sequence  
CC data for this patent can also be obtained in electronic format directly  
CC from USPTO at seqdata.uspto.gov/sequence.html  
XX  
SQ Sequence 25 BP; 13 A; 4 C; 4 G; 4 T; 0 U; 0 Other;  
  
Query Match 0.5%; Score 12.8; DB 1; Length 25;  
Best Local Similarity 70.8%; Pred. No. 5.7e+03;  
Matches 17; Conservative 0; Mismatches 7; Indels 0; Gaps 0;  
  
QY 1882 GTCAAAATTGATGTGCCCTAGATCA 1905  
Db 25 GTCCTTTTGTGATGTGCTTATATTA 2  
  
RESULT 5342  
ABA91535  
ID ABA91535 standard; DNA; 20 BP.  
XX  
AC ABA91535;  
XX  
DT 23-APR-2002 (first entry)  
XX  
DE DNA oligonucleotide AGT02023 used to test RNase H cleavage.  
XX  
KW Nucleic acid detection; probe; mismatch; ss.  
XX  
OS Synthetic.  
XX  
FH Key Location/Qualifiers  
FT misc\_feature 11 /\*tag= a  
FT /\*note= "mismatch to target DNA"  
FT misc\_feature 13 /\*tag= b  
FT /\*note= "mismatch to target DNA"  
XX  
PN WO200206531-A2.  
XX  
PD 24-JAN-2002.  
XX  
PF 12-JUL-2001; 2001WO-US022166.  
XX  
PR 14-JUL-2000; 2000US-00616761.  
PR 30-MAR-2001; 2001US-00823647.  
XX  
PA (GENE-) APPLIED GENE TECHNOLOGIES INC.  
XX  
PI Dattagupta N;  
XX  
DR WPI; 2002-171819/22.  
XX  
PT Probes for detecting target nucleotide sequence in sample, has sequence  
PT that forms hairpin structure having a double-stranded segment and single-  
PT stranded loop collectively forming region complementary to target  
PT sequence.  
XX  
PS Example 5; Page 50; 72pp; English.  
XX  
CC The present sequence is that of oligonucleotide AGT02023, which contains  
CC a single mismatch with a target DNA oligonucleotide (see ABA91531). It is  
CC one of a set of oligonucleotides (see ABA91532-37) containing  
CC mismatch(es) to the target DNA that were tested in a hybridisation/RNase  
CC H cleavage assay. The results showed that 2 mismatches between the target  
CC and the probe ablated RNase H cleavage. The invention provides probes for  
CC nucleic acid hybridisation. The probes form a hairpin structure  
CC comprising a double-stranded stem and a single-stranded loop, and are  
CC capable of both intramolecular and intermolecular hybridisation. The  
CC double-stranded stem may comprise a methylphosphonate DNA:RNA hybrid that  
CC is resistant to RNase H cleavage. When the probe hybridises with a target  
CC DNA, the RNA strand in the DNA:RNA duplex becomes sensitive to RNase H  
CC treatment and can be removed. Arrays and methods for nucleic acid



CC hybridisation using the probes are provided

XX Sequence 20 BP; 16 A; 0 C; 2 G; 2 T; 0 U; 0 Other;

SQ

Query Match 0.4%; Score 12.6; DB 1; Length 20;

Best Local Similarity 78.9%; Pred. No. 5.7e+03;

Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 2786 AAAAAAAAAAAAAAAAAA 2804

Db 1 AAAAAAAAAATGTGAAAAA 19

RESULT 5343

AAH80594/C

ID AAH80594 standard; cDNA; 20 BP.

XX

AC AAH80594;

XX

DT 11-SEP-2003 (revised)

DT 19-SEP-2001 (first entry)

XX

DE Oligonucleotide hybridisation potential related cDNA SEQ ID NO: 558.

XX

KW Nucleic acid hybridisation; probe; primer; human; rabbit; HIV-1;

KW disease diagnosis; ss.

XX

OS Human immunodeficiency virus 1.

XX

PN US6251588-B1.

XX

PD 26-JUN-2001.

XX

PF 10-FEB-1998; 98US-00021701.

XX

PR 10-FEB-1998; 98US-00021701.

XX

PA (AGIL-) AGILENT TECHNOLOGIES INC.

XX

PI Shannon KW, Wolber PK, Delenstarr GC, Webb PG, Kincaid RH;

XX

DR WPI; 2001-424456/45.

XX

PT Predicting the potential of an oligonucleotide to hybridize to a target

PT nucleotide sequence, useful for evaluating oligonucleotide probe

PT sequences, by identifying a oligonucleotides based on the evaluation of

PT parameters.

XX

PS Example 2; Col 65; 342pp; English.

XX

CC The present invention describes a method for predicting the potential of

CC an oligonucleotide to hybridise to a (complementary) target nucleotide

CC sequence, involving identifying a subset of oligonucleotides within the

CC predetermined number of unique oligonucleotides based on the evaluation

CC of the parameter. Oligonucleotides in the subset are identified that are

CC clustered along a region of the nucleotide sequence that is hybridisable

CC to the target nucleotide sequence. This is useful for evaluating

CC oligonucleotide probe sequences. The present sequence is an

CC oligonucleotide described in the exemplification of the invention.

CC (Updated on 11-SEP-2003 to standardise OS field)

XX

SQ Sequence 20 BP; 2 A; 4 C; 1 G; 13 T; 0 U; 0 Other;

Query Match 0.4%; Score 12.6; DB 1; Length 20;

Best Local Similarity 78.9%; Pred. No. 5.7e+03;

Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 2779 AGAATTGAAAAAAAAA 2797

Db 19 AGGGTTAAAAAGAAAAA 1

RESULT 5344

ABA91532

ID ABA91532 standard; DNA; 20 BP.

XX

AC ABA91532;

XX

DT 23-APR-2002 (first entry)

XX

DE DNA oligonucleotide AGT02020 used to test RNase H cleavage.

XX

KW Nucleic acid detection; probe; mismatch; ss.

XX

OS Synthetic.

XX

FH Key Location/Qualifiers

FT misc\_feature 13

FT /\*tag= a

FT /note= "mismatch to target DNA"

XX

PN WO200206531-A2.

XX

PD 24-JAN-2002.

XX

PF 12-JUL-2001; 2001WO-US022166.

XX

PR 14-JUL-2000; 2000US-00616761.

PR 30-MAR-2001; 2001US-00823647.

XX

PA (GENE-) APPLIED GENE TECHNOLOGIES INC.

XX

PI Dattagupta N;

XX

DR WPI; 2002-171819/22.

XX

PT Probes for detecting target nucleotide sequence in sample, has sequence

PT that forms hairpin structure having a double-stranded segment and single-

PT stranded loop collectively forming region complementary to target

PT sequence.

XX

PS Example 5; Page 49; 72pp; English.

XX

CC The present sequence is that of oligonucleotide AGT02020, which contains

CC a single mismatch with a target DNA oligonucleotide (see ABA91531). It is

CC one of a set of oligonucleotides (see ABA91532-37) containing

CC mismatch(es) to the target DNA that were tested in a hybridisation/RNase

CC H cleavage assay. The results showed that 2 mismatches between the target

CC and the probe ablated RNase H cleavage. The effect of one mismatch site

CC was less than that of two mismatch sites, and showed a polarity effect,

CC with stronger inhibition shown in assays with AGT02020 than in assays

CC using an oligonucleotide in which the mismatch was at an adjacent

CC position. The invention provides probes for nucleic acid hybridisation.

CC The probes form a hairpin structure comprising a double-stranded stem and

CC a single-stranded loop, and are capable of both intramolecular and

CC intermolecular hybridisation. The double-stranded stem may comprise a

CC methylphosphonate DNA:RNA hybrid that is resistant to RNase H cleavage.

CC When the probe hybridises with a target DNA, the RNA strand in the

CC DNA:RNA duplex becomes sensitive to RNase H treatment and can be removed.

CC Arrays and methods for nucleic acid hybridisation using the probes are

CC provided

XX

SQ Sequence 20 BP; 16 A; 0 C; 1 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 12.6; DB 1; Length 20;

Best Local Similarity 78.9%; Pred. No. 5.7e+03;

Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 2786 AAAAAAAAAAAAAAAAAA 2804

Db 1 AAAAAAAAAATTTGAAAAA 19

RESULT 5345

ADD81485/C

ID ADD81485 standard; DNA; 20 BP.



PR 10-FEB-1998; 98US-00021701.  
XX (AGIL-) AGILENT TECHNOLOGIES INC.  
PA Shannon KW, Wolber PK, Delenstarr GC, Webb PG, Kincaid RH;  
XX WPI; 2001-424456/45.  
DR  
XX Predicting the potential of an oligonucleotide to hybridize to a target  
PT nucleotide sequence, useful for evaluating oligonucleotide probe  
PT sequences, by identifying a oligonucleotides based on the evaluation of  
PT parameters.  
XX  
PS Example 2; Col 65; 342pp; English.  
XX  
CC The present invention describes a method for predicting the potential of  
CC an oligonucleotide to hybridise to a (complementary) target nucleotide  
CC sequence, involving identifying a subset of oligonucleotides within the  
CC predetermined number of unique oligonucleotides based on the evaluation  
CC of the parameter. Oligonucleotides in the subset are identified that are  
CC clustered along a region of the nucleotide sequence that is hybridisable  
CC to the target nucleotide sequence. This is useful for evaluating  
CC oligonucleotide probe sequences. The present sequence is an  
CC oligonucleotide described in the exemplification of the invention.  
CC (Updated on 11-SEP-2003 to standardise OS field)  
XX  
SQ Sequence 20 BP; 3 A; 4 C; 0 G; 13 T; 0 U; 0 Other;  
Query Match 0.4%; Score 12.6; DB 1; Length 20;  
Best Local Similarity 78.9%; Pred. No. 5.7e+03;  
Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 2779 AGAATTGAAAAA 2797  
DB 20 AGGTTAAAAAGAAAAA 2  
RESULT 5348  
AAL53963  
ID AAL53963 standard; DNA; 20 BP.  
XX  
AC AAL53963;  
XX  
DT 18-FEB-2003 (first entry)  
XX  
DE DNA mutation detection related oligo, SEQ ID No 13.  
XX  
KW Detecting; point mutation; hybridising; target DNA; duplex; RNase H;  
KW single nucleotide polymorphism; ss.  
XX  
OS Unidentified.  
XX  
XX US2002142308-A1.  
PN  
XX 03-OCT-2002.  
PD  
XX  
PF 30-MAR-2001; 2001US-00823634.  
XX  
PR 30-MAR-2001; 2001US-00823634.  
XX  
XX (DATT/) DATTA GUPTA N.  
PA (TSEN/) TSENG T.  
PA  
XX Dattagupta N, Tseng T;  
PI  
XX WPI; 2003-102506/09.  
DR  
XX Detecting point mutation in DNA strand, by hybridizing target DNA strand  
PT having mutation with test DNA strand to form duplex, contacting the  
PT duplex with RNase H and determining the cleavage of test strand by RNase  
PT H.  
PT  
XX Example 5; Fig 4; 26pp; English.  
PS

XX The invention relates to a novel method for detecting a point mutation in  
CC a DNA strand. The novel method comprises hybridising a target DNA strand  
CC containing or suspected of containing a point mutation with a test  
CC nucleic acid strand complementary to the DNA strand to form a target DNA  
CC strand/test nucleic acid strand duplex, contacting the duplex within the  
CC RNase H, and determining whether the ribonucleotide residues within the  
CC nucleotide sequence are cleaved by RNase H. The method is useful for  
CC detecting a point mutation in a DNA strand, where the point mutation to  
CC be detected is a single nucleotide polymorphism, preferably a  
CC polymorphism in a genome, e.g., a viral, bacterial, eukaryotic, mammalian  
CC or human genome. The method is useful to detect any nucleic acids from  
CC any species of organisms such as Acinetobacter, Bacillus, Candida,  
CC Enterococcus, Haemophilus, Mycobacterium and Streptococcus, and viruses.  
CC This polynucleotide sequence represents an oligo relating to the mutation  
CC detecting method of the invention  
XX  
SQ Sequence 20 BP; 16 A; 0 C; 1 G; 3 T; 0 U; 0 Other;  
Query Match 0.4%; Score 12.6; DB 1; Length 20;  
Best Local Similarity 78.9%; Pred. No. 5.7e+03;  
Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 2786 AAAAAA 2804  
DB 1 AAAAAAGTTTAAAAA 19  
RESULT 5349  
ADD81484/c  
ID ADD81484 standard; DNA; 20 BP.  
XX  
AC ADD81484;  
XX  
DT 29-JAN-2004 (first entry)  
XX  
DE HIV PRT antisense derived probe #413.  
XX  
KW ss; oligonucleotide hybridisation potential; efficient hybridisation;  
KW large array; minimum oligonucleotide synthesis; probe.  
XX  
OS Human immunodeficiency virus.  
XX  
PN US2003054346-A1.  
XX  
PD 20-MAR-2003.  
XX  
PF 15-FEB-2001; 2001US-00784674.  
XX  
PR 10-FEB-1998; 98US-00021701.  
XX  
PA (SHAN/) SHANNON K W.  
PA (WOLB/) WOLBER P K.  
PA (DELE/) DELENSTARR G C.  
PA (WEBB/) WEBB P G.  
PA (KINC/) KINCAID R H.  
XX  
PI Shannon KW, Wolber PK, Delenstarr GC, Webb PG, Kincaid RH;  
XX WPI; 2003-743746/70.  
DR  
XX Predicting potential of oligonucleotides to hybridize to target  
PT nucleotide sequence comprises determining and evaluating for each  
PT oligonucleotide a parameter predictive of the oligonucleotides ability to  
PT hybridize with target.  
XX  
PS Example 2; SEQ ID NO 557; 423pp; English.  
XX  
CC The invention relates to a method of predicting the potential of  
CC oligonucleotides to hybridise to target nucleotide sequences. The method  
CC is useful for predicting the potential of an oligonucleotide to hybridise  
CC to a target nucleotide sequence, e.g. RNA or DNA or a sequence that  
CC contains chemically modified nucleotides. The method is also useful for  
CC

CC predicting the potential of the oligonucleotides to hybridise to a  
CC complementary target nucleotide sequence. The method is useful to predict  
CC efficient hybridisation oligonucleotides for each of multiple target  
CC sequences therefore very large arrays may be constructed and tested with  
CC minimum synthesis of oligonucleotides. The present sequence represents a  
CC HIV PRT antisense derived probe.  
XX

SQ Sequence 20 BP; 3 A; 4 C; 0 G; 13 T; 0 U; 0 Other;

Query Match 0.4%; Score 12.6; DB 1; Length 20;  
Best Local Similarity 78.9%; Pred. No. 5.7e+03;  
Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 2779 AGAATTGAAAAA 2797  
Db 20 AGGGTTAAAAAAGAAAAA 2

RESULT 5350  
AAV69993/C  
ID AAV69993 standard; DNA; 20 BP.  
XX  
AC AAV69993;

DT 04-FEB-1999 (first entry)

DE Mouse c-jun protein antisense oligonucleotide #38.

XX  
KW Mouse; c-fos; c-jun; activating protein 1; AP-1; diagnosis; metastasis;  
KW antisense oligonucleotide; phosphorothioate; regulation;  
KW malignant tumour; cell cycle expression; hyperproliferative disease; ss.  
XX

OS Synthetic.  
OS Mus sp.

XX  
FH Key Location/Qualifiers  
FT modified\_base 1..20  
FT /\*tag= a  
FT /note= "phosphorothioate linkages"

XX WO9846272-A1.

XX 22-OCT-1998.

XX 14-APR-1998; 98WO-US007386.

XX 14-APR-1997; 97US-00837201.

XX (ISIS-) ISIS PHARM INC.

XX Dean NM, McKay R, Miraglia L, Baker B;

XX WPI; 1998-609906/51.

XX Antisense oligonucleotides regulating Activating Protein 1 subunits -  
PT hybridise with c-fos and c-jun mRNA, used for regulating metastasis, cell  
PT cycle expression and hyperproliferative disease.  
XX

PS Example 7; Page 52; 120pp; English.

XX  
CC AAV69993 to AAV70008 represent antisense oligonucleotides which are  
CC specifically hybridisable with a region of a nucleic acid encoding mouse  
CC c-Jun protein. The antisense compound regulates the expression of the c-  
CC Jun protein. The present invention also describes antisense  
CC oligonucleotides which regulate the c-Fos protein. The antisense  
CC oligonucleotides are used for the diagnosis and treatment of diseases or  
CC disorders associated with Activating Protein 1 expression, of which c-Fos  
CC and c-Jun are subunits. The antisense oligonucleotides are used in  
CC compositions as c-Fos and/or c-Jun together with a carrier and a  
CC chemotherapeutic agent. They are used to regulate the expression of c-Fos  
CC or c-Jun in cells or tissues, preferably by inhibiting metastasis. They  
CC also regulate cell cycle expression and can be used to treat an animal  
CC with, or being prone to, a hyperproliferative disease

XX

SQ Sequence 20 BP; 3 A; 11 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 12.6; DB 1; Length 20;  
Best Local Similarity 78.9%; Pred. No. 5.7e+03;  
Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1000 GCGGGAGAGTTGGACAAG 1018  
Db 19 GCGGCTGAAGTTGGGCGAG 1

RESULT 5351  
AAC65597  
ID AAC65597 standard; DNA; 20 BP.  
XX  
AC AAC65597;

DT 14-FEB-2001 (first entry)

DE Human uteroglobin SNP PCR primer hUG-3100GR.

XX  
KW Mouse; uteroglobin; immunoglobulin A mediated disease; IgA nephropathy;  
KW autoimmune disorder; pulmonary inflammation; Wegener's granulomatosis;  
KW Goodpasture's disease; diabetic glomerulosclerosis; PCR primer; ss.  
XX

OS Homo sapiens.

XX WO200062795-A2.

XX 26-OCT-2000.

XX 13-APR-2000; 2000WO-US009979.

XX 21-APR-1999; 99US-0130434P.

XX (USSH ) US DEPT HEALTH & HUMAN SERVICES.

XX Mukherjee AB, Zheng F, Zhang Z;

XX WPI; 2000-687100/67.

XX Use of a composition comprising uteroglobin (or a fragment, derivative,  
PT mimetic or variant), for inhibiting or treating an immunoglobulin-A  
PT mediated autoimmune disorders, e.g. diabetic glomerulosclerosis and  
PT pulmonary inflammation.  
XX

PS Example 12; Page 43; 60pp; English.

XX The present invention describes the use of uteroglobin in the diagnosis  
CC and prevention of IgA mediated diseases, such as IgA nephropathy,  
CC Wegener's granulomatosis, Goodpasture's disease and diabetic  
CC glomerulosclerosis. This is possible as uteroglobin binds to fibronectin,  
CC preventing the complexing of fibronectin with IgA and the deposition of  
CC immune complexes in the kidney  
XX

SQ Sequence 20 BP; 15 A; 3 C; 0 G; 2 T; 0 U; 0 Other;

Query Match 0.4%; Score 12.6; DB 1; Length 20;  
Best Local Similarity 78.9%; Pred. No. 5.7e+03;  
Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 2786 AAAAAA 2804  
Db 1 AAATAAATAACAACAAA 19

RESULT 5352

ABZ85536

ID ABZ85536 standard; DNA; 20 BP.

XX

AC ABZ85536;

XX



DT 17-OCT-2003 (first entry)  
XX Human oligonucleotide sequence.  
DE Human; antisense; lung dysfunction; nasal airway dysfunction;  
XX antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
XX Homo sapiens.  
OS WO200285308-A2.  
XX 31-OCT-2002.  
PN 23-APR-2002; 2002WO-US013135.  
XX 24-APR-2001; 2001US-0286137P.  
XX (EPIG-) EPIGENESIS PHARM INC.  
PA Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
XX Miller S, Tang L, Shahabuddin S;  
PI WPI; 2003-229219/22.  
XX Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX Claim 15; SEQ ID NO 778; 872pp; English.  
PS The invention relates to a novel pharmaceutical composition, which has a  
XX first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 15 A; 0 C; 4 G; 1 T; 0 U; 0 Other;  
Query Match 0.4%; Score 12.6; DB 1; Length 20;  
Best Local Similarity 78.9%; Pred. No. 5.7e+03;  
Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 2786 AAAAAAAAAAAAAAAAAA 2804  
Db 1 AAGAAAGAGAAAGGAAA 19  
RESULT 5353  
ABQ92966  
ID ABQ92966 standard; DNA; 20 BP.  
XX  
AC ABQ92966;  
XX

DT 29-AUG-2003 (revised)  
DT 21-OCT-2002 (first entry)  
XX T. tauschii/wheat D genome microsatellite cfd49 left PCR primer.  
DE Microsatellite marker; wheat; D genome; mapping; genotyping;  
XX polymorphism; phenotypic trait; QTL; quantitative trait locus;  
KW disease-associated gene; development factor; quality factor;  
KW resistance factor; wheat product; identification; detection;  
KW genetically modified wheat; PCR; primer; ss.  
XX Aegilops tauschii.  
OS Triticum aestivum.  
XX EP1217079-A1.  
PN 26-JUN-2002.  
XX 22-DEC-2000; 2000EP-00403659.  
XX 22-DEC-2000; 2000EP-00403659.  
XX (INRG ) INRA INST NAT RECH AGRONOMIQUE.  
PA Bernard M, Sourdilie P, Guyomarch H;  
XX WPI; 2002-550410/59.  
XX Map of wheat D genome comprising the genome location of a microsatellite  
PT marker, useful for e.g. identifying genes responsible for a desired  
PT phenotypic trait, especially quantitative trait loci in wheat, and  
PT diseases.  
XX Claim 4; Page 5; 105pp; English.  
PS The invention relates to a map of the bread wheat D genome comprising the  
XX genome location of a microsatellite marker selected from a group of 185  
CC such markers (ABQ92733-ABQ92917). The invention also encompasses the use  
CC of left (ABQ92918-ABQ93102) and right (ABQ93103-ABQ93287) primers to  
CC amplify and detect the microsatellite markers, and to identify genes  
CC responsible for a phenotypic trait of interest in wheat. Wheat is an  
CC allohexaploid species consisting of 3 diploid genomes designated A, B and  
CC D, resulting from two successive intercrossings involving at least three  
CC different species. The D genome is thought to have been introduced in the  
CC most recent intercrossing, between the amphiploid AABB and Triticum  
CC tauschii (DD), probably involving only a limited number of genotypes of  
CC both species. Due to its polyploid genome, the large size of its genome,  
CC and its low level of polymorphism, the genetic mapping of wheat has to  
CC date been difficult. Microsatellites are tandemly repeated sequences  
CC between one and six nucleotides long, and are very polymorphic in length,  
CC mainly due to polymerase slippage during replication. This high degree of  
CC polymorphism makes them especially suitable for the genetic mapping of  
CC species which show little intraspecies polymorphism, such as wheat. In  
CC addition, microsatellites are codominant, and exhibit Mendelian  
CC inheritance. The 185 microsatellite markers of the invention are  
CC developed from the ancestral diploid donor species Triticum tauschii and  
CC map to the wheat D genome, which is less polymorphic than the A or B  
CC genomes. These microsatellite markers thus help to overcome some of the  
CC problems associated with the genetic mapping of wheat. The wheat D genome  
CC map and the microsatellite markers and associated primers of the  
CC invention are useful for identifying genes responsible for a phenotypic  
CC trait of interest, most notably QTLs (quantitative trait loci). In  
CC particular they may be used for analysing genes and alleles implicated in  
CC disease and for identifying development factors, quality factors and  
CC factors conferring resistance to pathogens and xenobiotics. The  
CC microsatellite markers, and associated primers may be also be used in  
CC mapping and genotyping diploid and polyploid species of Triticum,  
CC particularly Aegilops, Triticum monococcum, Triticum durum, Triticum  
CC aestivum, or related species; for identifying cultivars and hybrids of  
CC Triticum and related species; to assess whether or not a product  
CC comprises wheat or a related species; and to assess whether or not a  
CC product comprises genetically modified wheat. The present sequence  
CC represents a specifically claimed Triticum tauschii/wheat genome D

CC microsatellite marker left PCR primer of the invention. (Updated on 29-  
CC AUG-2003 to standardise OS field)  
XX  
SQ Sequence 20 BP; 3 A; 3 C; 7 G; 7 T; 0 U; 0 Other; 0; Gaps 0;

Query Match 0.4%; Score 12.6; DB 1; Length 20;  
Best Local Similarity 78.9%; Pred. No. 5.7e+03;  
Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 829 TGAGGTCTTCTGCTCAGTC 847  
Db 1 TGAGTTCTTCTGCTGAGGC 19

RESULT 5354  
AAV48864  
ID AAV48864 standard; DNA; 20 BP.  
XX AC  
AC AAV48864;  
XX  
DT 15-OCT-1998 (first entry)  
XX  
DE Erbb-2 gene antisense oligonucleotide Erbb-2-N-73.  
XX  
KW Erbb-2; antisense oligonucleotide; modulate; gene expression; ss.  
XX  
OS Synthetic.  
OS Homo sapiens.  
XX  
PN EP856579-A1.  
XX  
PD 05-AUG-1998.  
XX  
PF 31-JAN-1997; 97EP-00101531.  
XX  
PR 31-JAN-1997; 97EP-00101531.  
XX  
PA (BIOG-) BIOGNOSTIK GES BIOMOLEKULARE DIAGNOSTIK.  
XX  
PI Schlingensiepen K, Brysch W;  
XX  
DR WPI; 1998-400910/35.  
XX  
PT Preparation of antisense oligo:nucleotide(s) which lack long runs of  
PT consecutive guanosine or inosine - and have specific ratio of residues  
PT able to form two or three hydrogen bonds, have greater activity and  
PT reduced toxicity, used therapeutically or to modulate growth of cells in  
PT culture.  
XX  
PS Example 4; Fig 6d; 286pp; English.  
XX  
CC AAV48709-886 represent antisense oligonucleotides directed against the  
CC Erbb-2 gene. Of these, only oligonucleotides AAV48709-91 resulted in  
CC significant reduction in Erbb-2 protein expression, while  
CC oligonucleotides AAV48792-886 had little effect. The oligonucleotides  
CC exemplify the invention. The specification describes oligonucleotides  
CC that contain 8-30 nucleotides, which contain at most 8 nucleotides that  
CC can each form three hydrogen bonds to cytosine; do not contain four  
CC consecutive nucleotides able to form three H-bonds each to four  
CC consecutive cytosines; do not contain two sequences of three consecutive  
CC nucleotides each able to form three H-bonds to three consecutive  
CC cytosines, and the ratio between residues able to form two H-bonds each  
CC (2R) or three such bonds (3R) is given by 2R/3R = 0.33-0.72. The  
CC oligonucleotides are used to modulate expression of genes, particularly  
CC the genes for p53, ErB-2, junB, junD, TGF-beta 1 or beta 2 to control  
CC proliferation of primary cell cultures (e.g. bone marrow stem, liver or  
CC kidney cells, osteoclasts, osteoblasts and/or keratinocytes). The  
CC oligonucleotides can also be used to analyse function of proteins (by  
CC altering their expression or activity) and therapeutically, e.g. in cases  
CC of cancer or (targeting TGF) for stimulating the immune system  
XX  
SQ Sequence 20 BP; 16 A; 2 C; 1 G; 1 T; 0 U; 0 Other;

Query Match 0.4%; Score 12.6; DB 1; Length 20;

Query Match 0.4%; Score 12.6; DB 1; Length 20;  
Best Local Similarity 78.9%; Pred. No. 5.7e+03;  
Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 2786 AAAAAAAAAAAAAAAAAAAAA 2804  
Db 1 AACAAACACAAAAAAAAAGTAA 19

RESULT 5355  
AAA40976/c  
ID AAA40976 standard; DNA; 20 BP.  
XX  
AC AAA40976;  
XX  
DT 16-AUG-2000 (first entry)  
XX  
DE Human TNFalpha antisense oligonucleotide ISIS# 100595.  
XX  
KW Antisense oligonucleotide; phosphorothioate; TNFalpha; cytokine; inhibit;  
KW tumour necrosis factor alpha; inflammatory bowel disease; diabetes;  
KW rheumatoid arthritis; infectious disease; multiple sclerosis; hepatitis;  
KW pancreatitis; atopic dermatitis; allograft rejection; autoimmune disease;  
KW inflammatory disease; ss.  
XX  
OS Synthetic.  
XX  
PN WO200020645-A1.  
XX  
PD 13-APR-2000.  
XX  
PF 05-OCT-1999; 99WO-US023205.  
XX  
PR 05-OCT-1998; 98US-00166186.  
PR 18-MAY-1999; 99US-00313932.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Baker BF, Bennett CF, Butler MM, Shanahan WJ;  
XX  
DR WPI; 2000-303808/26.  
XX  
PT Oligonucleotide for treating diseases associated with human tumor  
PT necrosis factor-alpha (TNF-alpha) such as, diabetes and rheumatoid  
PT arthritis, comprises nucleotide sequence complementary to intron of  
PT nucleic acid encoding TNF-alpha.  
XX  
PS Example 20; Page 95; 283pp; English.  
XX  
CC This sequence represents an antisense oligonucleotide sequence which  
CC targets a region of the human tumour necrosis factor alpha (TNFalpha)  
CC nucleotide sequence. TNFalpha is an important cytokine that plays a role  
CC in host defence. It is produced mainly in macrophages and monocytes in  
CC response to infection, invasion, injury or inflammation. Overexpression  
CC of TNFalpha can result in disease states, particularly in infectious,  
CC inflammatory and autoimmune diseases. The invention relates to antisense  
CC oligonucleotides, such as that represented by the present sequence which  
CC are capable of modulating the TNFalpha gene expression. The  
CC oligonucleotides optionally have a phosphorothioate backbone, and may  
CC also optionally contain at least one 2'-O-methoxyethyl modification. The  
CC oligonucleotides are useful for modulating the expression of human  
CC TNFalpha in cells and tissues, reducing a human cell inflammatory  
CC response, reducing the blood glucose level in a human and treating a  
CC human having a disease or condition associated with TNFalpha. Examples of  
CC diseases associated with TNFalpha include diabetes, inflammatory bowel  
CC disease, multiple sclerosis, pancreatitis, rheumatoid arthritis,  
CC infectious disease, hepatitis, atopic dermatitis or allograft rejection.  
CC The antisense oligonucleotides are also useful for modulating the  
CC function of a selected nucleic acid sequence in adipose tissue  
XX  
SQ Sequence 20 BP; 3 A; 8 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.4%; Score 12.6; DB 1; Length 20;

Matches	15:	Conservative	0:	Mismatches	4:	Liquids	0:	Gaps	0:
---------	-----	--------------	----	------------	----	---------	----	------	----

QY 2166 TTTTTTTTTTTTTTTTTT 2184  
| | | | | | | | | |  
Db 1 TATATATATTTTTTTTTT 19

RESULT 5357  
AAF24291/c  
ID AAF24291 standard; DNA; 20 BP.

DT 03-APR-2001 (first entry)

DT 03-APR-2001 (first entry)

complementary nucleic acid detection method related sequence #6:

AA Complementary nucleic acid; gene analysis; polymorphism; variation;  
KW DNA chip; primer; ss.  
KW

Unidentified.

EP1065278-A2.

03-JAN-2001.

07-JUN-2000: 2000EP-00112235.

07--TIN-1999: 99JP-00159339.

(ETITE ) EULIT PHOTO ETIM CO LTD

Makino Y, Abe Y, Ozawa M, Takagi M, Takenaka S, Yamashita K:

DATE: 2001 110003/15

11

comparing flow of electric current from of LO electroconductive substrate

Example 1; Page 13; 28pp; English.

strand to determine the degree of complementarity between two sequences.

polymorphisms and variation between genes

Sequence 20 BP: 4 A; 0 C; 0 G; 16 T; 0 U; 0 Other;

Query Match	0.4%;	Score 12.6;	DB 1;	Length 20;
Best Local Similarity	78.9%;	Pred. No. 5.7e+03;		
Gap 1	0.0;	Mismatch 0.0;	Indels 0.0;	Gaps 0.0;

RESULT 5358  
ABA91531  
ID ABA91531 standard; DNA: 20 BP.

AC ABA91531;

DT 23-APR-2002 (first entry)

DE DNA oligonucleotide AGT02009 used to test RNase H cleavage.

DNA-RNA hybrid: RNase H; nucleic acid detection; ss.

synthetic.

33



PN WO200206531-A2.  
XX  
PD 24-JAN-2002.  
XX  
PF 12-JUL-2001; 2001WO-US022166.  
XX  
PR 14-JUL-2000; 2000US-00616761.  
PR 30-MAR-2001; 2001US-00823647.  
XX  
PA (GENE-) APPLIED GENE TECHNOLOGIES INC.  
XX  
PI Dattagupta N;  
XX  
DR WPI; 2002-171819/22.  
XX  
XX  
PT Probes for detecting target nucleotide sequence in sample, has sequence  
PT that forms hairpin structure having a double-stranded segment and single-  
PT stranded loop collectively forming region complementary to target  
PT sequence.  
XX  
PS Example 4; Page 49; 72pp; English.  
XX  
CC The present sequence is that of DNA oligonucleotide AGT02009, which was  
CC used as a target oligonucleotide in an assay to determine the minimum  
CC number of ribonucleotides in DNA:RNA hybrids required for RNase H  
CC cleavage (see ABA91527-30), and in an assay which showed that mismatches  
CC between a target DNA and a hairpin DNA probe inhibit RNase H activity  
CC (see ABA91532-37). The invention provides probes for nucleic acid  
CC hybridisation. The probes form a hairpin structure comprising a double-  
CC stranded stem and a single-stranded loop, and are capable of both  
CC intramolecular and intermolecular hybridisation. The double-stranded stem  
CC may comprise a methylphosphonate DNA:RNA hybrid that is resistant to  
CC RNase H cleavage. When the probe hybridises with a target DNA, the RNA  
CC strand in the DNA:RNA duplex becomes sensitive to RNase H treatment and  
CC can be removed. Arrays and methods for nucleic acid hybridisation using  
CC the probes are provided  
XX  
SQ Sequence 20 BP; 16 A; 0 C; 0 G; 4 T; 0 U; 0 Other;  
  
Query Match 0.4%; Score 12.6; DB 1; Length 20;  
Best Local Similarity 78.9%; Pred. No. 5.7e+03;  
Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 2786 AAAAAAAAAAAAAAAAAA 2804  
|||  
Db 1 AAAAAAAAAATTATAAAA 19  
  
RESULT 5359  
ABA91533  
ID ABA91533 standard; DNA; 20 BP.  
XX  
AC ABA91533;  
XX  
DT 23-APR-2002 (first entry)  
XX  
DE DNA oligonucleotide AGT02021 used to test RNase H cleavage.  
XX  
KW Nucleic acid detection; probe; mismatch; ss.  
XX  
OS Synthetic.  
XX  
FH Key Location/Qualifiers  
FT misc\_feature 12  
FT /\*tag= a  
FT /note= "mismatch to target DNA"  
XX  
PN WO200206531-A2.  
XX  
PD 24-JAN-2002.  
XX  
PF 12-JUL-2001; 2001WO-US022166.  
XX

PR 14-JUL-2000; 2000US-00616761.  
PR 30-MAR-2001; 2001US-00823647.  
XX  
PA (GENE-) APPLIED GENE TECHNOLOGIES INC.  
XX  
PI Dattagupta N;  
XX  
DR WPI; 2002-171819/22.  
XX  
XX  
PT Probes for detecting target nucleotide sequence in sample, has sequence  
PT that forms hairpin structure having a double-stranded segment and single-  
PT stranded loop collectively forming region complementary to target  
PT sequence.  
XX  
PS Example 5; Page 50; 72pp; English.  
XX  
CC The present sequence is that of oligonucleotide AGT02021, which contains  
CC a single mismatch with a target DNA oligonucleotide (see ABA91531). It is  
CC one of a set of oligonucleotides (see ABA91532-37) containing  
CC mismatch(es) to the target DNA that were tested in a hybridisation/RNase  
CC H cleavage assay. The results showed that 2 mismatches between the target  
CC and the probe ablated RNase H cleavage. The effect of one mismatch site  
CC was less than that of two mismatch sites, and showed a polarity effect,  
CC with weaker inhibition shown in assays with AGT02021 than in assays using  
CC an oligonucleotide in which the mismatch was at an adjacent position.  
CC Oligonucleotides in which the mismatch was C or A rather than G showed  
CC similar inhibition of RNase H cleavage. The invention provides probes for  
CC nucleic acid hybridisation. The probes form a hairpin structure  
CC comprising a double-stranded stem and a single-stranded loop, and are  
CC capable of both intramolecular and intermolecular hybridisation. The  
CC double-stranded stem may comprise a methylphosphonate DNA:RNA hybrid that  
CC is resistant to RNase H cleavage. When the probe hybridises with a target  
CC DNA, the RNA strand in the DNA:RNA duplex becomes sensitive to RNase H  
CC treatment and can be removed. Arrays and methods for nucleic acid  
CC hybridisation using the probes are provided  
XX  
SQ Sequence 20 BP; 16 A; 0 C; 1 G; 3 T; 0 U; 0 Other;  
  
Query Match 0.4%; Score 12.6; DB 1; Length 20;  
Best Local Similarity 78.9%; Pred. No. 5.7e+03;  
Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 2786 AAAAAAAAAAAAAAAAAA 2804  
|||  
Db 1 AAAAAAAAAATTATAAAA 19  
  
RESULT 5360  
ABA91527/c  
ID ABA91527 standard; DNA; 20 BP.  
XX  
AC ABA91527;  
XX  
DT 23-APR-2002 (first entry)  
XX  
DE DNA-RNA-DNA oligonucleotide AGT02008 used to test RNase H cleavage.  
XX  
KW DNA-RNA hybrid; RNase H; nucleic acid detection; ss.  
XX  
OS Synthetic.  
XX  
FH Key Location/Qualifiers  
FT misc\_RNA 8.11  
FT /\*tag= a  
FT /label= RNA  
XX  
PN WO200206531-A2.  
XX  
PD 24-JAN-2002.  
XX  
PF 12-JUL-2001; 2001WO-US022166.  
XX  
PR 14-JUL-2000; 2000US-00616761.



PR 30-MAR-2001; 2001US-00823647.  
XX (GENE-) APPLIED GENE TECHNOLOGIES INC.  
PA  
XX  
PI Dattagupta N;  
XX  
XX  
DR WPI; 2002-171819/22.  
XX  
PT Probes for detecting target nucleotide sequence in sample, has sequence  
PT that forms hairpin structure having a double-stranded segment and single-  
PT stranded loop collectively forming region complementary to target  
PT sequence.  
XX  
PS Example 4; Page 49; 72pp; English.  
XX  
XX The present sequence is that of DNA-RNA-DNA hybrid oligonucleotide  
CC AGT02008. This is one of a set of oligonucleotides (see ABA91527-30) used  
CC to assess the minimum number of ribonucleotides in DNA-RNA chimeric  
CC oligonucleotides required for RNase H cleavage. Each oligonucleotide of  
CC the set had a different number of ribonucleotides, 4 in the present case.  
CC The oligonucleotides were mixed with target DNA oligonucleotide AGT02009  
CC (see ABA91531) and incubated with RNase H (5 U/ml) at 37 degrees C for 30  
CC minutes. The results showed that 4 ribonucleotides were the minimum  
CC number for RNA cleavage. The invention provides probes for nucleic acid  
CC hybridisation. The probes form a hairpin structure comprising a double-  
CC stranded stem and a single-stranded loop, and are capable of both  
CC intramolecular and intermolecular hybridisation. The double-stranded stem  
CC may comprise a methylphosphonate DNA:RNA hybrid that is resistant to  
CC RNase H cleavage. When the probe hybridises with a target DNA, the RNA  
CC strand in the DNA:RNA duplex becomes sensitive to RNase H treatment and  
CC can be removed. Arrays and methods for nucleic acid hybridisation using  
CC the probes are provided  
XX  
SQ Sequence 20 BP; 4 A; 0 C; 0 G; 16 T; 0 U; 0 Other;  
  
Query Match 0.4%; Score 12.6; DB 1; Length 20;  
Best Local Similarity 78.9%; Pred. No. 5.7e+03;  
Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
Qy 2786 AAAAAAAAAAAAAAAAAA 2804  
Db 20 AAAAAAAAAATTTAAAAA 2  
  
RESULT 5361.  
ABA91536  
ID ABA91536 standard; DNA; 20 BP.  
XX  
AC ABA91536;  
XX  
DT 23-APR-2002 (first entry)  
XX  
DE DNA oligonucleotide AGT02024 used to test RNase H cleavage.  
XX  
KW Nucleic acid detection; probe; mismatch; ss.  
XX  
OS Synthetic.  
XX  
FH Key Location/Qualifiers  
FT misc\_feature 12  
FT /\*tag= a  
FT /note= "mismatch to target DNA"  
XX  
XX WO200206531-A2.  
PN  
XX  
PD 24-JAN-2002.  
XX  
XX 12-JUL-2001; 2001WO-US022166.  
PF  
XX 14-JUL-2000; 2000US-00616761.  
PR  
PR 30-MAR-2001; 2001US-00823647.  
XX  
PA (GENE-) APPLIED GENE TECHNOLOGIES INC.

XX Dattagupta N;  
PI  
XX  
DR WPI; 2002-171819/22.  
XX  
PT Probes for detecting target nucleotide sequence in sample, has sequence  
PT that forms hairpin structure having a double-stranded segment and single-  
PT stranded loop collectively forming region complementary to target  
PT sequence.  
XX  
PS Example 5; Page 50; 72pp; English.  
XX  
XX The present sequence is that of oligonucleotide AGT02024, which contains  
CC a single mismatch with a target DNA oligonucleotide (see ABA91531). It is  
CC one of a set of oligonucleotides (see ABA91532-37) containing  
CC mismatch(es) to the target DNA that were tested in a hybridisation/RNase  
CC H cleavage assay. The results showed that 2 mismatches between the target  
CC and the probe ablated RNase H cleavage. The effect of one mismatch site  
CC was less than that of two mismatch sites; and showed a polarity effect,  
CC with weaker inhibition shown in assays with AGT02021 than in assays using  
CC an oligonucleotide in which the mismatch was at an adjacent position.  
CC Oligonucleotides in which the mismatch was G or A rather than C showed  
CC similar inhibition of RNase H cleavage. The invention provides probes for  
CC nucleic acid hybridisation. The probes form a hairpin structure  
CC comprising a double-stranded stem and a single-stranded loop, and are  
CC capable of both intramolecular and intermolecular hybridisation. The  
CC double-stranded stem may comprise a methylphosphonate DNA:RNA hybrid that  
CC is resistant to RNase H cleavage. When the probe hybridises with a target  
CC DNA, the RNA strand in the DNA:RNA duplex becomes sensitive to RNase H  
CC treatment and can be removed. Arrays and methods for nucleic acid  
CC hybridisation using the probes are provided  
XX  
SQ Sequence 20 BP; 16 A; 1 C; 0 G; 3 T; 0 U; 0 Other;  
  
Query Match 0.4%; Score 12.6; DB 1; Length 20;  
Best Local Similarity 78.9%; Pred. No. 5.7e+03;  
Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
Qy 2786 AAAAAAAAAAAAAAAAAA 2804  
Db 1 AAAAAAAAAATTTAAAAA 19  
  
RESULT 5362  
ABK85429/c  
ID ABK85429 standard; DNA; 20 BP.  
XX  
AC ABK85429;  
XX  
DT 29-AUG-2003 (revised)  
DT 14-AUG-2002 (first entry)  
XX  
DE Oligonucleotide #7 binding to specific site of HIV-1 RNA.  
XX  
KW Human immunodeficiency virus type 1; HIV-1 detection method; primer;  
KW probe; ss.  
XX  
OS Human immunodeficiency virus 1.  
XX  
XX EPI203826-A2.  
PN  
XX  
PD 08-MAY-2002.  
XX  
PF 30-OCT-2001; 2001EP-00125378.  
XX  
PR 30-OCT-2000; 2000JP-00334937.  
XX  
XX (TOYJ ) TOSOH CORP.  
PA  
XX Ishizuka T, Ishiguro T, Saitoh J;  
PI  
XX WPI; 2002-473032/51.  
DR  
XX

PT An oligonucleotide useful for detection of an RNA derived from HIV-1 in  
PT clinical tests and diagnosis.  
XX  
PS Claim 6; Page 14; 34pp; English.  
XX  
CC The present invention relates to oligonucleotides binding to specific  
CC sites of human immunodeficiency virus type 1 (HIV-1) RNA. The  
CC oligonucleotides are useful for detecting HIV-1 in clinical tests and  
CC diagnosis. The oligonucleotides provide simple, speedy and sensitive  
CC detection of HIV-1 RNA which can bind to an intramolecularly free region  
CC of the genomic RNA of HIV-1 at relatively low and constant temperatures.  
CC The detection method comprises synthesising a cDNA by the action of an  
CC RNA-dependent DNA polymerase by using a specific sequence in an RNA  
CC derived from HIV-1 anticipated in a sample as a template, a first primer  
CC containing a sequence complementary to the specific sequence and a second  
CC primer containing a sequence homologous to the specific sequence (either  
CC of which additionally has a promoter sequence for the RNA polymerase at  
CC the 5' end). ABK85423-ABK85440 represent oligonucleotides binding to  
CC specific sites of HIV-1 RNA. They can be used either as first primers or  
CC probes. (Updated on 29-AUG-2003 to standardise OS field)  
XX  
SQ Sequence 20 BP; 1 A; 2 C; 1 G; 16 T; 0 U; 0 Other;  
  
Query Match 0.4%; Score 12.6; DB 1; Length 20;  
Best Local Similarity 78.9%; Pred. No. 5.7e+03;  
Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 2786 AAAAAAAAAAAAAAAAAAAAAA 2804  
Db ||||| ||||| |||||  
20 AAAACAAAGTAAGAAAAA 2  
  
RESULT 5363  
ABA97638  
ID ABA97638 standard; DNA; 20 BP.  
XX  
AC ABA97638;  
XX  
DT 11-APR-2002 (first entry)  
XX  
DE Poly t nucleotide sequence.  
XX  
KW ss; fluorochrome; nucleic acid probe; fluorescence.  
XX  
OS Unidentified.  
XX  
PN JP2001286300-A.  
XX  
PD 16-OCT-2001.  
XX  
PF 20-APR-2000; 2000JP-00120097.  
XX  
PR 20-APR-1999; 99JP-00111601.  
PR 24-AUG-1999; 99JP-00236666.  
PR 30-AUG-1999; 99JP-00242693.  
PR 01-FEB-2000; 2000JP-00028896.  
XX  
PA (BIOI-) BIOINDUSTRY KYOKAI SH.  
PA (KANK-) KANKYO ENG KK.  
PA (KEIZ-) KEIZAI SANGYOSHO SANGYO GIJUTSU SOGO KEN.  
XX  
DR WPI; 2002-134193/18.  
XX  
PT Measurement of nucleic acids, using a nucleic acid probe and analysis of  
PT the obtained data.  
XX  
PS Example 6; Page 18; 34pp; Japanese.  
XX  
CC This invention relates to a method for measuring nucleic acids using a  
CC nucleic acid probe labelled with a fluorochrome. The nucleic acid probe  
CC decreases the fluorescence of the fluorochrome when hybridised with a  
CC target nucleic acid, the decrease in the fluorescence is measured. The  
CC method can be used for measuring a target nucleic acid

XX SQ Sequence 20 BP; 4 A; 1 C; 0 G; 15 T; 0 U; 0 Other;  
  
Query Match 0.4%; Score 12.6; DB 1; Length 20;  
Best Local Similarity 78.9%; Pred. No. 5.7e+03;  
Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 2166 TTTTTTTTTTTTTTTTTT 2184  
Db ||||| ||||| |||||  
1 TATATATATTTTTTTTTTT 19  
  
RESULT 5364  
ABL94461  
ID ABL94461 standard; DNA; 20 BP.  
XX  
AC ABL94461;  
XX  
DT 29-JUL-2002 (first entry)  
XX  
DE Mouse C/EBP beta phosphorothioate antisense oligonucleotide, SEQ ID:228.  
XX  
KW Mouse; murine; C/EBP beta; CCAAT/enhancer-binding protein beta; C/EPB2;  
KW LAP; TCF5; CRP2; NFIL6; IL6DBP; NF-M; AGP/EBP; Apc/EBP;  
KW transcription factor; tissue development; cellular function;  
KW proliferation; differentiation; hormone responsiveness;  
KW oxidative stress response; IL-6 signalling mediator; interleukin-6;  
KW carbohydrate metabolism; immunity; Th1 response; female fertility;  
KW gluconeogenesis; ovarian; cancer; tumour formation; type II; diabetes;  
KW infection; inflammation; expression inhibition; phosphorothioate;  
KW antisense oligonucleotide; ss.  
XX  
OS Mus musculus.  
XX  
FH Key Location/Qualifiers  
FT modified\_base 1..20  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "Phosphorothioate linkages"  
FT modified\_base 1..5  
FT /\*tag= b  
FT /mod\_base= OTHER  
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides. All 2' MOE  
FT cytosines are 5-methylcytosine"  
FT modified\_base 16..20  
FT /\*tag= c  
FT /mod\_base= OTHER  
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides. All 2' MOE  
FT cytosines are 5-methylcytosine"  
XX  
PN US6271030-B1.  
XX  
PD 07-AUG-2001.  
XX  
PF 14-JUN-2000; 2000US-00593711.  
XX  
PR 14-JUN-2000; 2000US-00593711.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Monia BP, Butler MM, Wyatt J;  
XX WPI; 2002-214451/27.  
DR  
XX Novel antisense compound targeted to nucleic acids encoding human or  
PT mouse CCAAT/enhancer binding protein (C/EBP) beta, useful in vitro for  
PT inhibiting expression of human or mouse C/EBP beta in cells/tissues.  
XX  
PS Example 17; Col 53-54; 69pp; English.  
XX  
CC Sequences ABL94252-ABL94476 represent antisense oligonucleotides targeted  
CC to the human or mouse CCAAT/enhancer-binding protein alpha (C/EBP alpha)  
CC gene, which inhibit its expression. The antisense oligonucleotides were

CC designed to target different regions of the human and/or mouse C/EBP  
CC alpha RNA, and were analysed for their effect on C/EBP alpha mRNA levels  
CC by quantitative real-time PCR. The C/EBP family of proteins are a family  
CC of transcription factors which regulate the expression of a wide range of  
CC genes that control normal tissue development, cellular function, cellular  
CC proliferation and functional differentiation. C/EBP beta (also known as  
CC C/EBP2, LAP, TCF5, CRP2, NFIL6, IL6DBP, NF-M, AGP/EBP and Apc/EBP)  
CC primarily regulates hormone responsiveness and oxidative stress responses  
CC and is a mediator of IL-6 (interleukin-6) signalling. C/EBP beta is  
CC thought to be involved in carbohydrate metabolism, immunity, the Th1  
CC response, female fertility and gluconeogenic pathways. C/EBP beta is  
CC expressed in the liver, lung, spleen, kidney, brain, and testis, with the  
CC highest expression found in the lung. It is also expressed at a higher  
CC level in malignant ovarian tissue compared with normal ovarian tissue,  
CC and its expression in pancreas is upregulated in response to chronically  
CC elevated levels of glucose, indicating that it is involved in the  
CC impairment of insulin secretion in type II diabetes. The oligonucleotides  
CC of the invention are useful for diagnosis, prevention and treatment of  
CC conditions associated with C/EBP beta expression, such as cancer  
CC (particularly ovarian cancer), tumour formation, diabetes (particularly  
CC type II diabetes), infection, or inflammation  
XX  
SQ Sequence 20 BP; 16 A; 4 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.4%; Score 12.6; DB 1; Length 20;  
Best Local Similarity 78.9%; Pred. No. 5.7e+03;  
Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 2786 AAAAAAAAAAAAAAAAAAAAA 2804  
| | | | | | | | | | | | | | | | | |  
Db 2 ACACAAACACAAACCAAAAAA 20

RESULT 5365  
ABZ89486  
ID ABZ89486 standard; DNA; 20 BP.

XX AC ABZ89486;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.  
XX  
PN WO200285308-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013135.  
XX  
PR 24-APR-2001; 2001US-0286137P.  
XX  
PA (EPIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
DR WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.

XX Disclosure; SEQ ID NO 4728; 872pp; English.  
PS

XX The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, increasing levels of ubiquinone or  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 15 A; 4 C; 0 G; 1 T; 0 U; 0 Other;

Query Match 0.4%; Score 12.6; DB 1; Length 20;  
Best Local Similarity 78.9%; Pred. No. 5.7e+03;  
Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 2786 AAAAAAAAAAAAAAAAAAAAA 2804  
| | | | | | | | | | | | | | | | | |  
Db 2 ACACAAACCAACCAAAAAA 20

RESULT 5366  
ABZ89718/c  
ID ABZ89718 standard; DNA; 20 BP.

XX AC ABZ89718;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.  
XX  
PN WO200285308-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013135.  
XX  
PR 24-APR-2001; 2001US-0286137P.  
XX  
PA (EPIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
DR WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.

XX Disclosure; SEQ ID NO 4960; 872pp; English.  
PS



XX The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 2 A; 0 C; 2 G; 16 T; 0 U; 0 Other;

Query Match 0.4%; Score 12.6; DB 1; Length 20;  
Best Local Similarity 78.9%; Pred. No. 5.7e+03;  
Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 2786 AAAAAAAAAAAAAAAAAA 2804  
Db 20 AAAAAAAAAAATTCCAA 2

RESULT 5367  
AAL53961/c  
ID AAL53961 standard; DNA; 20 BP.  
XX  
AC AAL53961;  
XX  
DT 18-FEB-2003 (first entry)  
XX  
DE DNA mutation detection related ribonucleotide, SEQ ID No 11.  
XX  
KW Detecting; point mutation; hybridising; target DNA; duplex; RNase H;  
KW single nucleotide polymorphism; ss.  
XX  
OS Unidentified.  
XX  
PN US2002142308-A1.  
XX  
PD 03-OCT-2002.  
XX  
PF 30-MAR-2001; 2001US-00823634.  
XX  
PR 30-MAR-2001; 2001US-00823634.  
XX  
PA (DATT/) DATTAGUPTA N.  
PA (TSEN/) TSENG T.  
XX  
PI Dattagupta N, Tseng T;  
XX  
DR WPI; 2003-102506/09.  
XX

XX The invention relates to a novel method for detecting a point mutation in  
CC a DNA strand. The novel method comprises hybridising a target DNA strand  
CC containing or suspected of containing a point mutation with a test  
CC nucleic acid strand complementary to the DNA strand to form a target DNA  
CC strand/test nucleic acid duplex, contacting the duplex with an  
CC RNase H, and determining whether the ribonucleotide residues within the  
CC nucleotide sequence are cleaved by RNase H. The method is useful for  
CC detecting a point mutation in a DNA strand, where the point mutation to  
CC be detected is a single nucleotide polymorphism, preferably a  
CC polymorphism in a genome, e.g., a viral, bacterial, eukaryotic, mammalian  
CC or human genome. The method is useful to detect any nucleic acids from  
CC containing or suspected of containing a point mutation with a test  
XX  
PS Example 4; Fig 3; 26pp; English.  
XX

XX The invention relates to a novel method for detecting a point mutation in  
CC a DNA strand. The novel method comprises hybridising a target DNA strand  
CC containing or suspected of containing a point mutation with a test

CC nucleic acid strand complementary to the DNA strand to form a target DNA  
CC strand/test nucleic acid strand duplex, contacting the duplex with an  
CC RNase H, and determining whether the ribonucleotide residues within the  
CC nucleotide sequence are cleaved by RNase H. The method is useful for  
CC detecting a point mutation in a DNA strand, where the point mutation to  
CC be detected is a single nucleotide polymorphism, preferably a  
CC polymorphism in a genome, e.g., a viral, bacterial, eukaryotic, mammalian  
CC or human genome. The method is useful to detect any nucleic acids from  
CC any species of organisms such as Acinetobacter, Bacillus, Candida,  
CC Enterococcus, Haemophilus, Mycobacterium and Streptococcus, and viruses.  
CC This polymucleotide sequence represents a ribonucleotide relating to the  
CC mutation detecting method of the invention  
XX  
SQ Sequence 20 BP; 4 A; 0 C; 0 G; 16 T; 0 U; 0 Other;

Query Match 0.4%; Score 12.6; DB 1; Length 20;  
Best Local Similarity 78.9%; Pred. No. 5.7e+03;  
Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 2786 AAAAAAAAAAAAAAAAAA 2804  
Db 20 AAAAAAAAAAATTTAAAAA 2

RESULT 5368  
AAL53959/c  
ID AAL53959 standard; DNA; 20 BP.  
XX  
AC AAL53959;  
XX  
DT 18-FEB-2003 (first entry)  
XX  
DE DNA mutation detection related ribonucleotide, SEQ ID No 9.  
XX  
KW Detecting; point mutation; hybridising; target DNA; duplex; RNase H;  
KW single nucleotide polymorphism; ss.  
XX  
OS Unidentified.  
XX  
PN US2002142308-A1.  
XX  
PD 03-OCT-2002.  
XX  
PF 30-MAR-2001; 2001US-00823634.  
XX  
PR 30-MAR-2001; 2001US-00823634.  
XX  
PA (DATT/) DATTAGUPTA N.  
PA (TSEN/) TSENG T.  
XX  
PI Dattagupta N, Tseng T;  
XX  
DR WPI; 2003-102506/09.  
XX

XX The invention relates to a novel method for detecting a point mutation in  
CC a DNA strand. The novel method comprises hybridising a target DNA strand  
CC containing or suspected of containing a point mutation with a test  
CC nucleic acid strand complementary to the DNA strand to form a target DNA  
CC strand/test nucleic acid strand duplex, contacting the duplex with an  
CC RNase H, and determining whether the ribonucleotide residues within the  
CC nucleotide sequence are cleaved by RNase H. The method is useful for  
CC detecting a point mutation in a DNA strand, where the point mutation to  
CC be detected is a single nucleotide polymorphism, preferably a  
CC polymorphism in a genome, e.g., a viral, bacterial, eukaryotic, mammalian  
CC or human genome. The method is useful to detect any nucleic acids from  
CC any species of organisms such as Acinetobacter, Bacillus, Candida,  
XX  
PS Example 4; Fig 3; 26pp; English.  
XX

XX The invention relates to a novel method for detecting a point mutation in  
CC a DNA strand. The novel method comprises hybridising a target DNA strand  
CC containing or suspected of containing a point mutation with a test  
CC nucleic acid strand complementary to the DNA strand to form a target DNA  
CC strand/test nucleic acid strand duplex, contacting the duplex with an  
CC RNase H, and determining whether the ribonucleotide residues within the  
CC nucleotide sequence are cleaved by RNase H. The method is useful for  
CC detecting a point mutation in a DNA strand, where the point mutation to  
CC be detected is a single nucleotide polymorphism, preferably a  
CC polymorphism in a genome, e.g., a viral, bacterial, eukaryotic, mammalian  
CC or human genome. The method is useful to detect any nucleic acids from  
CC any species of organisms such as Acinetobacter, Bacillus, Candida,



CC Enterococcus, Haemophilus, Mycobacterium and Streptococcus, and viruses.  
CC This polynucleotide sequence represents a ribonucleotide relating to the  
CC mutation detecting method of the invention  
XX  
SQ Sequence 20 BP; 4 A; 0 C; 0 G; 16 T; 0 U; 0 Other;  
  
Query Match 0.4%; Score 12.6; DB 1; Length 20;  
Best Local Similarity 78.9%; Pred. No. 5.7e+03;  
Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 2786 AAAAAAAAAAAAAAAAAAAAAA 2804  
Db 20 AAAAAAAAAATTTTAAAAAA 2  
  
RESULT 5369  
AAL53967  
ID AAL53967 standard; DNA; 20 BP.  
XX  
AC AAL53967;  
XX  
DT 18-FEB-2003 (first entry)  
XX  
DE DNA mutation detection related ribonucleotide, SEQ ID No 17.  
XX  
KW Detecting; point mutation; hybridising; target DNA; duplex; RNase H;  
KW single nucleotide polymorphism; ss.  
XX  
OS Unidentified.  
XX  
PN US2002142308-A1.  
XX  
PD 03-OCT-2002.  
XX  
PF 30-MAR-2001; 2001US-00823634.  
XX  
PR 30-MAR-2001; 2001US-00823634.  
XX  
PA (DATT/) DATTA Gupta N.  
PA (TSEN/) TSENG T.  
XX  
PI Dattagupta N, Tseng T;  
XX  
DR WPI; 2003-102506/09.  
XX  
PT Detecting point mutation in DNA strand, by hybridizing target DNA strand  
PT having mutation with test DNA strand to form duplex, contacting the  
PT duplex with RNase H and determining the cleavage of test strand by RNase  
PT H.  
XX  
PS Example 5; Fig 4; 26pp; English.  
XX  
CC The invention relates to a novel method for detecting a point mutation in  
CC a DNA strand. The novel method comprises hybridising a target DNA strand  
CC containing or suspected of containing a point mutation with a test  
CC nucleic acid strand complementary to the DNA strand to form a target DNA  
CC strand/test nucleic acid strand duplex, contacting the duplex with an  
CC RNase H, and determining whether the ribonucleotide residues within the  
CC nucleotide sequence are cleaved by RNase H. The method is useful for  
CC detecting a point mutation in a DNA strand, where the point mutation to  
CC be detected is a single nucleotide polymorphism, preferably a  
CC polymorphism in a genome, e.g., a viral, bacterial, eukaryotic, mammalian  
CC or human genome. The method is useful to detect any nucleic acids from  
CC any species of organisms such as Acinetobacter, Bacillus, Candida,  
CC Enterococcus, Haemophilus, Mycobacterium and Streptococcus, and viruses.  
CC This polynucleotide sequence represents a ribonucleotide relating to the  
CC mutation detecting method of the invention  
XX  
SQ Sequence 20 BP; 16 A; 1 C; 0 G; 3 T; 0 U; 0 Other;  
  
Query Match 0.4%; Score 12.6; DB 1; Length 20;  
Best Local Similarity 78.9%; Pred. No. 5.7e+03;  
Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 2786 AAAAAAAAAAAAAAAAAAAAAA 2804  
Db 1 AAAAAAAAAATCTTAAAAAA 19  
  
RESULT 5370  
AAL53958/C  
ID AAL53958 standard; DNA; 20 BP.  
XX  
AC AAL53958;  
XX  
DT 18-FEB-2003 (first entry)  
XX  
DE DNA mutation detection related ribonucleotide, SEQ ID No 8.  
XX  
KW Detecting; point mutation; hybridising; target DNA; duplex; RNase H;  
KW single nucleotide polymorphism; ss.  
XX  
OS Unidentified.  
XX  
PN US2002142308-A1.  
XX  
PD 03-OCT-2002.  
XX  
PF 30-MAR-2001; 2001US-00823634.  
XX  
PR 30-MAR-2001; 2001US-00823634.  
XX  
PA (DATT/) DATTA Gupta N.  
PA (TSEN/) TSENG T.  
XX  
PI Dattagupta N, Tseng T;  
XX  
DR WPI; 2003-102506/09.  
XX  
PT Detecting point mutation in DNA strand, by hybridizing target DNA strand  
PT having mutation with test DNA strand to form duplex, contacting the  
PT duplex with RNase H and determining the cleavage of test strand by RNase  
PT H.  
XX  
PS Example 4; Fig 3; 26pp; English.  
XX  
CC The invention relates to a novel method for detecting a point mutation in  
CC a DNA strand. The novel method comprises hybridising a target DNA strand  
CC containing or suspected of containing a point mutation with a test  
CC nucleic acid strand complementary to the DNA strand to form a target DNA  
CC strand/test nucleic acid strand duplex, contacting the duplex with an  
CC RNase H, and determining whether the ribonucleotide residues within the  
CC nucleotide sequence are cleaved by RNase H. The method is useful for  
CC detecting a point mutation in a DNA strand, where the point mutation to  
CC be detected is a single nucleotide polymorphism, preferably a  
CC polymorphism in a genome, e.g., a viral, bacterial, eukaryotic, mammalian  
CC or human genome. The method is useful to detect any nucleic acids from  
CC any species of organisms such as Acinetobacter, Bacillus, Candida,  
CC Enterococcus, Haemophilus, Mycobacterium and Streptococcus, and viruses.  
CC This polynucleotide sequence represents a ribonucleotide relating to the  
CC mutation detecting method of the invention  
XX  
SQ Sequence 20 BP; 4 A; 0 C; 0 G; 16 T; 0 U; 0 Other;  
  
Query Match 0.4%; Score 12.6; DB 1; Length 20;  
Best Local Similarity 78.9%; Pred. No. 5.7e+03;  
Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 2786 AAAAAAAAAAAAAAAAAAAAAA 2804  
Db 20 AAAAAAAAAATTTTAAAAAA 2  
  
RESULT 5371  
AAL53962  
ID AAL53962 standard; DNA; 20 BP.

XX AAL53962;  
XX  
XX DT 18-FEB-2003 (first entry)  
XX  
XX DE DNA mutation detection related oligo, SEQ ID No 12.  
XX  
KW Detecting; point mutation; hybridising; target DNA; duplex; RNase H;  
KW single nucleotide polymorphism; ss.  
XX  
OS Unidentified.  
XX  
XX PN US2002142308-A1.  
XX  
XX PD 03-OCT-2002.  
XX  
XX PF 30-MAR-2001; 2001US-00823634.  
XX  
XX PR 30-MAR-2001; 2001US-00823634.  
XX  
XX PA (DATT/) DATTAGUPTA N.  
XX PA (TSEN/) TSENG T.  
XX  
PI Dattagupta N, Tseng T;  
XX  
XX DR WPI; 2003-102506/09.  
XX  
XX CC The invention relates to a novel method for detecting a point mutation in a DNA strand, by hybridizing target DNA strand containing or suspected of containing a point mutation with a test nucleic acid strand complementary to the DNA strand to form a target DNA strand/test nucleic acid strand duplex, contacting the duplex with an RNase H, and determining whether the ribonucleotide residues within the nucleotide sequence are cleaved by RNase H. The method is useful for detecting a point mutation in a DNA strand, where the point mutation to be detected is a single nucleotide polymorphism, preferably a polymorphism in a genome, e.g., a viral, bacterial, eukaryotic, mammalian or human genome. The method is useful to detect any nucleic acids from any species of organisms such as Acinetobacter, Bacillus, Candida, Enterococcus, Haemophilus, Mycobacterium and Streptococcus, and viruses. This polynucleotide sequence represents an oligo relating to the mutation detecting method of the invention  
XX  
SQ Sequence 20 BP; 16 A; 0 C; 0 G; 4 T; 0 U; 0 Other;  
  
Query Match 0.4%; Score 12.6; DB 1; Length 20;  
Best Local Similarity 78.9%; Pred. No. 5.7e+03;  
Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 2786 AAAAAAAAAAAAAAAAAAAAAA 2804  
Db 1 AAAAAAAAAATTTTAAAAAAAA 19  
  
RESULT 5372  
AAL53960/c  
ID AAL53960 standard; DNA; 20 BP.  
XX  
XX AC AAL53960;  
XX  
XX DT 18-FEB-2003 (first entry)  
XX  
XX DE DNA mutation detection related ribonucleotide, SEQ ID No 10.  
XX  
KW Detecting; point mutation; hybridising; target DNA; duplex; RNase H;  
KW single nucleotide polymorphism; ss.

XX OS Unidentified.  
XX  
XX PN US2002142308-A1.  
XX  
XX PD 03-OCT-2002.  
XX  
XX PF 30-MAR-2001; 2001US-00823634.  
XX  
XX PR 30-MAR-2001; 2001US-00823634.  
XX  
XX PA (DATT/) DATTAGUPTA N.  
XX PA (TSEN/) TSENG T.  
XX  
PI Dattagupta N, Tseng T;  
XX  
XX DR WPI; 2003-102506/09.  
XX  
XX PT Detecting point mutation in DNA strand, by hybridizing target DNA strand having mutation with test DNA strand to form duplex, contacting the duplex with RNase H and determining the cleavage of test strand by RNase H.  
XX  
XX PS Example 4; Fig 3; 26pp; English.  
XX  
XX CC The invention relates to a novel method for detecting a point mutation in a DNA strand. The novel method comprises hybridising a target DNA strand containing or suspected of containing a point mutation with a test nucleic acid strand complementary to the DNA strand to form a target DNA strand/test nucleic acid strand duplex, contacting the duplex with an RNase H, and determining whether the ribonucleotide residues within the nucleotide sequence are cleaved by RNase H. The method is useful for detecting a point mutation in a DNA strand, where the point mutation to be detected is a single nucleotide polymorphism, preferably a polymorphism in a genome, e.g., a viral, bacterial, eukaryotic, mammalian or human genome. The method is useful to detect any nucleic acids from any species of organisms such as Acinetobacter, Bacillus, Candida, Enterococcus, Haemophilus, Mycobacterium and Streptococcus, and viruses. This polynucleotide sequence represents a ribonucleotide relating to the mutation detecting method of the invention  
XX  
SQ Sequence 20 BP; 4 A; 0 C; 0 G; 16 T; 0 U; 0 Other;  
  
Query Match 0.4%; Score 12.6; DB 1; Length 20;  
Best Local Similarity 78.9%; Pred. No. 5.7e+03;  
Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 2786 AAAAAAAAAAAAAAAAAAAAAA 2804  
Db 20 AAAAAAAAAATTTTAAAAAAAA 2  
  
RESULT 5373  
AAL53964  
ID AAL53964 standard; DNA; 20 BP.  
XX  
XX AC AAL53964;  
XX  
XX DT 18-FEB-2003 (first entry)  
XX  
XX DE DNA mutation detection related oligo, SEQ ID No 14.  
XX  
KW Detecting; point mutation; hybridising; target DNA; duplex; RNase H;  
KW single nucleotide polymorphism; ss.  
XX  
XX OS Unidentified.  
XX  
XX PN US2002142308-A1.  
XX  
XX PD 03-OCT-2002.  
XX  
XX PF 30-MAR-2001; 2001US-00823634.

PR 30-MAR-2001; 2001US-00823634.  
XX  
PA (DATT/) DATTAGUPTA N.  
PA (TSEN/) TSENG T.  
XX  
PI Dattagupta N, Tseng T;  
XX  
XX WPI; 2003-102506/09.  
DR  
XX  
XX  
PT Detecting point mutation in DNA strand, by hybridizing target DNA strand  
PT having mutation with test DNA strand to form duplex, contacting the  
PT duplex with RNase H and determining the cleavage of test strand by RNase  
PT H.  
XX  
XX  
PS Example 5; Fig 4; 26pp; English.  
XX  
XX The invention relates to a novel method for detecting a point mutation in  
CC a DNA strand. The novel method comprises hybridising a target DNA strand  
CC containing or suspected of containing a point mutation with a test  
CC nucleic acid strand complementary to the DNA strand to form a target DNA  
CC strand/test nucleic acid strand duplex, contacting the duplex with an  
CC RNase H, and determining whether the ribonucleotide residues within the  
CC nucleotide sequence are cleaved by RNase H. The method is useful for  
CC detecting a point mutation in a DNA strand, where the point mutation to  
CC be detected is a single nucleotide polymorphism, preferably a  
CC polymorphism in a genome, e.g., a viral, bacterial, eukaryotic, mammalian  
CC or human genome. The method is useful to detect any nucleic acids from  
CC any species of organisms such as Acintobacter, Bacillus, Candida,  
CC Enterococcus, Haemophilus, Mycobacterium and Streptococcus, and viruses.  
CC This polynucleotide sequence represents an oligo relating to the mutation  
CC detecting method of the invention  
XX  
SQ Sequence 20 BP; 16 A; 0 C; 1 G; 3 T; 0 U; 0 Other;  
  
Query Match 0.4%; Score 12.6; DB 1; Length 20;  
Best Local Similarity 78.9%; Pred. No. 5.7e+03;  
Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 2786 AAAAAAAAAAAAAAAAAA 2804  
Db 1 AAAAAAATGTTAAAAAAA 19  
  
RESULT 5374  
AAL53966  
ID AAL53966 standard; DNA; 20 BP.  
XX  
AC AAL53966;  
XX  
DT 18-FEB-2003 (first entry)  
XX  
DE DNA mutation detection related oligo, SEQ ID No 16.  
XX  
KW Detecting; point mutation; hybridising; target DNA; duplex; RNase H;  
KW single nucleotide polymorphism; ss.  
XX  
OS Unidentified.  
XX  
PN US2002142308-A1.  
XX  
PD 03-OCT-2002.  
XX  
XX 30-MAR-2001; 2001US-00823634.  
PF  
XX 30-MAR-2001; 2001US-00823634.  
PR  
XX (DATT/) DATTAGUPTA N.  
PA (TSEN/) TSENG T.  
XX  
PI Dattagupta N, Tseng T;  
XX  
XX WPI; 2003-102506/09.  
DR  
XX

PT Detecting point mutation in DNA strand, by hybridizing target DNA strand  
PT having mutation with test DNA strand to form duplex, contacting the  
PT duplex with RNase H and determining the cleavage of test strand by RNase  
PT H.  
XX  
XX  
PS Example 5; Fig 4; 26pp; English.  
XX  
XX The invention relates to a novel method for detecting a point mutation in  
CC a DNA strand. The novel method comprises hybridising a target DNA strand  
CC containing or suspected of containing a point mutation with a test  
CC nucleic acid strand complementary to the DNA strand to form a target DNA  
CC strand/test nucleic acid strand duplex, contacting the duplex with an  
CC RNase H, and determining whether the ribonucleotide residues within the  
CC nucleotide sequence are cleaved by RNase H. The method is useful for  
CC detecting a point mutation in a DNA strand, where the point mutation to  
CC be detected is a single nucleotide polymorphism, preferably a  
CC polymorphism in a genome, e.g., a viral, bacterial, eukaryotic, mammalian  
CC or human genome. The method is useful to detect any nucleic acids from  
CC any species of organisms such as Acintobacter, Bacillus, Candida,  
CC Enterococcus, Haemophilus, Mycobacterium and Streptococcus, and viruses.  
CC This polynucleotide sequence represents an oligo relating to the mutation  
CC detecting method of the invention  
XX  
SQ Sequence 20 BP; 16 A; 0 C; 2 G; 2 T; 0 U; 0 Other;  
  
Query Match 0.4%; Score 12.6; DB 1; Length 20;  
Best Local Similarity 78.9%; Pred. No. 5.7e+03;  
Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 2786 AAAAAAAAAAAAAAAAAA 2804  
Db 1 AAAAAAAGTGTAAAAAAA 19  
  
RESULT 5375  
ACD05204/c  
ID ACD05204 standard; DNA; 20 BP.  
XX  
AC ACD05204;  
XX  
DT 05-AUG-2003 (first entry)  
XX  
DE Tumour necrosis factor alpha antisense oligonucleotide #207.  
XX  
KW Tumour necrosis factor alpha; TNF-alpha; antiinflammatory; antirheumatic;  
KW antiarthritic; antidiabetic; dermatological; hepatotropic; antiasthmatic;  
KW inflammatory disorder; inflammatory bowel disease; Crohn's disease;  
KW colitis; rheumatoid arthritis; diabetes; pancreatitis;  
KW multiple sclerosis; atopic dermatitis; asthma; hepatitis;  
KW antisense technology; ss.  
XX  
OS Synthetic.  
XX  
PN US2003022848-A1.  
XX  
PD 30-JAN-2003.  
XX  
PF 02-APR-2001; 2001US-00824322.  
XX  
XX 05-OCT-1998; 98US-00166186.  
PR 18-MAY-1999; 99US-00313932.  
XX  
XX (BAKE/) BAKER B F.  
PA (BENN/) BENNETT C F.  
PA (BUTL/) BUTLER M M.  
PA (SHAN/) SHANAHAN W R.  
XX  
PI Baker BF, Bennett CF, Butler MM, Shanahan WR;  
XX WPI; 2003-447433/42.  
XX  
PT Treating inflammatory disorders such as inflammatory bowel disease,  
PT Crohn's disease or rheumatoid arthritis, in a subject, by administering

PT oligonucleotide which inhibits expression of human tumor necrosis factor  
PT alpha.

PS Example 22; Page 37; 142pp; English.

XX The invention describes a method of treating an inflammatory disorder in  
CC an individual, comprising administering to the individual an  
CC oligonucleotide upto 30 nucleotides in length complementary to a nucleic  
CC acid molecule encoding human tumor necrosis factor (TNF)-alpha. The  
CC method is useful for treating an inflammatory disorder such as  
CC inflammatory bowel disease, Crohn's disease, colitis or rheumatoid  
CC arthritis, in an individual. The method is also useful for treating  
CC diabetes, pancreatitis, multiple sclerosis, atopic dermatitis, asthma,  
CC and hepatitis in an individual. This sequence represents an antisense  
CC oligonucleotide used to modulate expression of tumour necrosis factor  
CC alpha (TNF-alpha)

SQ Sequence 20 BP; 3 A; 8 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.4%; Score 12.6; DB 1; Length 20;  
Best Local Similarity 78.9%; Pred. No. 5.7e+03;  
Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1449 TGAACCTCGGACGACGAG 1467

Db 19 TGGATCTGGAGACGAGG 1

RESULT 5376

AAAL4463/C

ID AAAL4463 standard; RNA; 21 BP.

XX AC AAAL4463;

XX 21-AUG-2000 (first entry)

XX AUUUA RNA target sequence.

XX AUUUA sequence; RNA target molecule; RNA binding protein identification;  
KW ss.

XX Synthetic.

XX WO200020637-A1.

XX 13-APR-2000.

XX 16-SEP-1999; 99WO-US021672.

XX 02-OCT-1998; 98US-00165868.

XX (MESS-) MESSAGE PHARM INC.

XX Giordano T, Beach DL, Temeles GL;

XX WPI; 2000-303802/26.

PT Nucleic acid molecules useful for identifying compounds affecting  
PT interactions between RNA molecules and identifying RNA binding proteins.

PS Example 1; Page 33; 58pp; English.

XX The invention relates to mRNA sequences which bind to RNA binding  
CC proteins, and their use for identifying RNA binding proteins and  
CC compounds which have an effect on the interactions between an RNA binding  
CC protein and an RNA molecule. The disclosed sequences are the 3',  
CC untranslated region (3' UTR) sequences APP-R1, APP-D3 and APP-I1 from the  
CC human amyloid precursor protein mRNA (AAA14456-A14458); the 3' UTR of  
CC human interleukin-10 (IL-10) mRNA (AAA14459); the 3' UTR of human erb-B2  
CC mRNA (AAA14460); and the 5' UTR of human insulin-like growth factor I  
CC receptor (IGF-IR) mRNA (AAA14461). The disclosed mRNA sequences may be  
CC used to identify compounds affecting interactions between an RNA molecule  
CC comprising the sequence and an RNA binding protein. Such compounds can

CC then be included with a carrier in pharmaceutical compositions for  
CC altering expression of a gene comprising the sequences, which can be  
CC administered to individuals or cells requiring altered expression of the  
CC gene. The mRNA sequences are also useful to identify RNA binding proteins  
CC which interact with them. Compounds identified as having the ability to  
CC affect such RNA binding interactions may therefore be useful as drugs for  
CC modulating protein levels in disease states. The present sequence  
CC represents an AUUUA RNA sequence used as a target molecule in an  
CC exemplification of the invention in an assay for detecting interactions  
CC between RNA molecules and RNA binding proteins

SQ Sequence 21 BP; 6 A; 0 C; 0 G; 0 T; 15 U; 0 Other;

Query Match 0.4%; Score 12.6; DB 1; Length 21;

Best Local Similarity 78.9%; Pred. No. 5.8e+03;

Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 2786 AAAAAAAAAAAAAAAA 2804

Db 20 AAATAAATAAATAATAAA 2

RESULT 5377

AAAL50228/C

ID AAL50228 standard; mRNA; 21 BP.

XX AC AAL50228;

XX 13-FEB-2003 (first entry)

XX Human ARE-mRNA sequence #1.

XX ARE-mRNA; protein secretion inhibition; ARE-mRNA regulation;  
KW inflammation; arthritis; autoimmune disease; septic shock; blood clot;  
KW stroke; TNFalpha; tumour necrosis factor alpha; antiinflammatory;  
KW antiarthritic; antibacterial; immunosuppressive; cerebroprotective;  
KW antipyretic; immunomodulator; adenylate-uridylate rich element; ss.

XX Homo sapiens.

XX WO200283842-A2.

XX 24-OCT-2002.

XX 08-APR-2002; 2002WO-US010898.

XX 10-APR-2001; 2001US-0282974P.

XX (MESS-) MESSAGE PHARM INC.

XX Giordano T, Sturgess MA;

XX WPI; 2003-046924/04.

XX Modulating Adenylate-Uridylate Rich element-mRNA regulation involves  
PT administering new amide compound that inhibits secretion of protein  
PT encoded by ARE-mRNA, useful for treating inflammation, arthritis and  
PT autoimmune diseases.

PS Disclosure; Fig 5; 147pp; English.

XX The present invention relates to a method of modulating the regulation of  
CC an adenylate-uridylate rich element (ARE)-mRNA, which involves  
CC administering new compounds that inhibits secretion of a protein encoded  
CC by an ARE-mRNA. This can be used in the treatment of inflammation,  
CC arthritis, autoimmune diseases, septic shock, blood clot, stroke, fever,  
CC acute respiratory distress syndrome (ARDS) and cachexia. The present  
CC sequence is an ARE-mRNA shown in the exemplification of the invention

SQ Sequence 21 BP; 6 A; 0 C; 0 G; 1 T; 14 U; 0 Other;

Query Match 0.4%; Score 12.6; DB 1; Length 21;

Best Local Similarity 78.9%; Pred. No. 5.8e+03;



Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 2786 AAAAAAAAAAAAAAAAAA 2804  
Db 20 AAATAAATAAATAAATAA 2

RESULT 5378  
AAL53707/c  
ID AAL53707 standard; RNA; 21 BP.  
XX  
AC AAL53707;  
XX  
DT 07-FEB-2003 (first entry)  
XX  
DE Adenylate Uridylate-rich element motif SEQ ID No 1.  
XX  
KW Target RNA; target RNA:support-attached test compound; flow cytometry;  
KW mass spectrometry; high-throughput screening; RNA motif; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO200283837-A1.  
XX  
PD 24-OCT-2002.  
XX  
PF 11-APR-2002; 2002WO-US011758.  
XX  
PR 11-APR-2001; 2001US-0282966P.  
XX  
PA (PTCT-) PTC THERAPEUTICS INC.  
XX  
PI Almstead NG;  
XX  
XX WPI; 2003-075534/07.  
XX  
PT Identifying a test compound that binds to a target RNA molecule by  
PT separating the detectably labeled target RNA:support-attached test  
PT compound complex from uncomplexed target RNA molecules and test compounds  
PT by flow cytometry.  
XX  
PS Disclosure; Page 16; 131pp; English.  
XX  
CC The invention relates to a novel method for identifying a test compound  
CC that binds to a target RNA molecule comprising separating the detectably  
CC labeled target RNA:support-attached test compound complex from  
CC uncomplexed target RNA molecules and test compounds. The separating  
CC process is carried out by flow cytometry and determining a structure of  
CC the type of test compound of the RNA:support-attached test compound  
CC complex by mass spectrometry. The method is useful for high-throughput  
CC screening of libraries of compounds to identify pharmaceutical leads.  
CC This polynucleotide sequence represents one of the target RNA motifs/  
CC regions of the invention  
XX  
SQ Sequence 21 BP; 6 A; 0 C; 0 G; 0 T; 15 U; 0 Other;  
Query Match 0.4%; Score 12.6; DB 1; Length 21;  
Best Local Similarity 78.9%; Pred. No. 5.8e+03;  
Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 2786 AAAAAAAAAAAAAAAAAA 2804  
Db 20 AAATAAATAAATAAATAA 2

RESULT 5379  
AAD49639/c  
ID AAD49639 standard; mRNA; 21 BP.  
XX  
AC AAD49639;  
XX  
DT 24-MAR-2003 (first entry)  
XX

DE Human adenylate uridylate-rich element (ARE) motif mRNA #1.  
XX  
KW Amyloidosis; haemophilia; Alzheimer's disease; atherosclerosis; cancer;  
KW gigantism; dwarfism; hypothyroidism; hyperthyroidism; cystic fibrosis;  
KW autoimmune disorder; aging; inflammation; diabetes; obesity; anorectic;  
KW neurodegenerative disorder; Parkinson's disease; gene therapy; virucide;  
KW haemostatic; antibacterial; nootropic; neuroprotective; cytostatic;  
KW fungicide; human; adenylate uridylate-rich element; ARE; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO200283953-A1.  
XX  
PD 24-OCT-2002.  
XX  
PF 11-APR-2002; 2002WO-US011757.  
XX  
PR 11-APR-2001; 2001US-0282965P.  
XX  
PA (PTCT-) PTC THERAPEUTICS INC.  
XX  
XX Rando R, Welch E;  
XX  
XX WPI; 2003-075561/07.  
DR  
XX  
PT Identifying a test compound that binds to a target RNA molecule for  
PT treating or preventing amyloidosis, hemophilia, cancer, gigantism,  
PT diabetes, by contacting a detectably labeled target RNA molecule with a  
PT library of test compounds.  
XX  
PS Example; Page 18; 152pp; English.  
XX  
CC The invention relates to a method for identifying a test compound that  
CC binds to a target RNA molecule, which comprises contacting a detectably  
CC labelled target RNA molecule with a library of test compounds under  
CC conditions that permit direct binding of the labelled target RNA to a  
CC member of the library of test compounds so that a detectably labeled  
CC target RNA:test compound complex is formed. The method is useful for  
CC screening libraries of compounds for those that are selectively bind to a  
CC pre-selected target RNA. The compounds are useful for inhibiting the  
CC formation of a specific bound RNA:host cell factor complexes in vivo.  
CC They are also useful for treating or preventing diseases associated with  
CC overproduction or decreased protein function, such as amyloidosis,  
CC haemophilia, Alzheimer's disease, atherosclerosis, cancer, gigantism,  
CC dwarfism, hypothyroidism, hyperthyroidism, autoimmune disorders, aging,  
CC inflammation, cystic fibrosis, diabetes, obesity, neurodegenerative  
CC disorders, Parkinson's disease or infections (bacterial, viral, fungal).  
CC The invention is also used in gene therapy. The present sequence is human  
CC adenylate uridylate-rich element (ARE) motif mRNA. This sequence is used  
CC to illustrate the method of the invention  
XX  
SQ Sequence 21 BP; 6 A; 0 C; 0 G; 0 T; 15 U; 0 Other;  
Query Match 0.4%; Score 12.6; DB 1; Length 21;  
Best Local Similarity 78.9%; Pred. No. 5.8e+03;  
Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 2786 AAAAAAAAAAAAAAAAAA 2804  
Db 20 AAATAAATAAATAAATAA 2

RESULT 5380  
ACC83520/c  
ID ACC83520 standard; mRNA; 21 BP.  
XX  
AC ACC83520;  
XX  
DT 08-SEP-2003 (first entry)  
XX  
DE AU rich element (ARE).  
XX  
KW AU-rich element; ARE; exosome; mRNA turnover; antiinflammatory;

KW cytostatic; ss.  
XX  
OS Unidentified.  
XX  
PN WO2003044166-A2.  
XX  
PD 30-MAY-2003.  
XX  
PF 14-NOV-2002; 2002WO-US036665.  
XX  
PR 15-NOV-2001; 2001US-0334712P.  
XX  
PA (REGC ) UNIV CALIFORNIA.  
XX  
PI Chen C, Karin M;  
XX  
DR WPI; 2003-457602/43.  
XX  
PT New purified mammalian exosome, useful for treating immune diseases e.g.  
PT diabetes, cirrhosis, scleroderma, lupus, arthritis, or multiple  
PT sclerosis, inflammatory diseases, cancer, or hormone deficiency disease  
PT e.g. osteoporosis.  
XX  
PS Disclosure; Page 53; 127pp; English.  
XX  
CC The present sequence is that of a Group I Cluster AU rich element (ARE).  
CC AREs play a role in mRNA stability. The invention provides methods of  
CC altering the level of ARE-containing RNA, e.g. an RNA containing the  
CC present motif. The human exosome has been purified and characterised. It  
CC promotes the degradation of ARE-containing RNAs. A claimed method for  
CC altering the level of an ARE-containing RNA involves contacting the RNA  
CC with an ARE-binding protein, a mammalian (human) exosome and an agent  
CC that alters the level of binding of the exosome to the ARE-binding  
CC protein. Levels of mRNA are decreased or increased by impacting the level  
CC of degradation of the mRNA. Reducing the level of a cytokine, proto-  
CC oncogene or growth factor RNA can be used to treat an immune disease,  
CC inflammatory disease or cancer. Increasing the level of a target RNA can  
CC be performed in a subject capable of developing a hormone deficiency  
XX  
SQ Sequence 21 BP; 6 A; 0 C; 0 G; 0 T; 15 U; 0 Other;  
  
Query Match 0.4%; Score 12.6; DB 1; Length 21;  
Best Local Similarity 78.9%; Pred. No. 5.8e+03;  
Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 2786 AAAAAAAAAAAAAAAAAA 2804  
Db ||| ||| ||| ||| ||| |||  
20 AAATAAATAATAATAATAA 2  
  
RESULT 5381  
ADE86000/c  
ID ADE86000 standard; RNA; 21 BP.  
XX  
AC ADE86000;  
XX  
DT 29-JAN-2004 (first entry)  
XX  
DE AU-rich element motif.  
XX  
KW Human; AU-rich element; antiinflammatory; Hu-antigen R; ss.  
XX  
OS Synthetic.  
XX  
PN WO2003087815-A2.  
XX  
PD 23-OCT-2003.  
XX  
PF 16-APR-2003; 2003WO-EP004008.  
XX  
PR 17-APR-2002; 2002US-0373207P.  
XX  
PA (NOVS ) NOVARTIS AG.

PA (NOVS ) NOVARTIS PHARMA GMBH.  
XX  
PI Auer M, Meisner N, Uhl V;  
XX  
DR WPI; 2003-833795/77.  
XX  
PT Identifying an agent having inhibitory effects on the complex-formation  
PT of ARE-containing mRNA and HuR protein, useful for treating disorders  
PT with aberrant production of a cytokine, growth factor, proto-oncogene or  
PT a viral protein.  
XX  
PS Example 5; Page 20; 32pp; English.  
XX  
CC The present sequence is that of an AU-rich element (ARE) motif. A 2-  
CC dimensional FIDA anisotropy analysis was performed to determine the  
CC affinity of human Hu-antigen R (HuR) for this, and other, AREs. Kd values  
CC of soluble and non-soluble forms of full-length HuR ADE85987 for the ARE  
CC were 0.4 +/- 0.05 and 23.47 +/- 8.92 nM, respectively. The RNA sequence  
CC motif NNUUNUUU was identified as the binding site for HuR. The complex  
CC formation of an ARE-containing mRNA with an HuR protein induces the  
CC expression of various disease causing/mediating substances, such as  
CC inflammatory acting substances, e.g. cytokines, growth factors, proto-  
CC oncogenes and viral proteins. Agents which inhibit complex formation may  
CC thus prevent the expression of such substances and may be used in the  
CC treatment of e.g. inflammatory diseases. The invention provides an assay  
CC for identifying compounds with an inhibitory effect on selected HuR-ARE  
CC target interactions. A pharmaceutical composition comprising an agent  
CC identified by the assay can be used to treat a disorder having an  
CC aetiology associated with the production of a cytokine, growth factor  
CC proto-oncogene or a viral protein.  
XX  
SQ Sequence 21 BP; 6 A; 0 C; 0 G; 0 T; 15 U; 0 Other;  
  
Query Match 0.4%; Score 12.6; DB 1; Length 21;  
Best Local Similarity 78.9%; Pred. No. 5.8e+03;  
Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 2786 AAAAAAAAAAAAAAAAAA 2804  
Db ||| ||| ||| ||| ||| |||  
20 AAATAAATAATAATAATAA 2  
  
RESULT 5382  
AAH91420  
ID AAH91420 standard; DNA; 21 BP.  
XX  
AC AAH91420;  
XX  
DT 09-OCT-2001 (first entry)  
XX  
DE Human inflammatory bowel disease associated polymorphic site #495.  
XX  
KW Human; inflammatory bowel disease; Crohn's disease; ulcerative colitis;  
KW single nucleotide polymorphism; SNP; chromosome 19p13; paternity test;  
KW chromosome 5q31-33; forensic test; gene therapy; ds.  
XX  
OS Homo sapiens.  
XX  
FH Key Location/Qualifiers  
FT misc\_feature 10  
FT /\*tag= a  
FT /note= "SNP, optionally T or C at this position"  
XX  
PN WO200142511-A2.  
XX  
PD 14-JUN-2001.  
XX  
PF 11-DEC-2000; 2000WO-US033632.  
XX  
PR 10-DEC-1999; 99US-0170257P.  
PR 10-APR-2000; 2000US-0196046P.  
XX  
PA (WHED ) WHITEHEAD INST BIOMEDICAL RES.



CC and disease states. By using longer primers, and/or an alteration in the  
CC annealing temperatures, the number of false positives can be reduced.  
CC First, cDNA is prepared from total cellular RNA using 12 different 22-  
CC base oligonucleotides (AAT58484-95) that are targeted to the poly A tail  
CC of pol II mRNA transcripts. The last two bases of each primer varies so  
CC as to anchor the primer to the 3' end of different sets of mRNAs. A  
CC second set of 12 22-base oligo primers (AAT58472-83) is designed to  
CC randomly select a subset of cDNAs from each of the twelve 3' primers. PCR  
CC amplification of a subset of cDNAs is carried out in a two step process  
CC using particular 5' and 3' primers. The amplified gene products can then  
CC be directly sequenced or rapidly subcloned for DNA sequencing

SQ Sequence 22 BP; 4 A; 3 C; 3 G; 12 T; 0 U; 0 Other;  
Query Match 0.4%; Score 12.6; DB 1; Length 22;  
Best Local Similarity 78.9%; Pred. No. 5.9e+03;  
Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1977 TGAAAAAAGAAAAAGTGTG 1995  
Db 22 TTAAAAAAGAAAAAGCTTG 4

RESULT 5385  
AAZ47351/c  
ID AAZ47351 standard; DNA; 22 BP.

XX AAZ47351;

DT 06-MAR-2000 (first entry)

DE PCR primer K used in differential display analysis of Aspergillus oryzae.  
KW Dopa decarboxylase; DDC2; DDC3; increased yield; hormone; receptor;  
XX antibody; reporter; enzyme; polypeptide production; primer; ss.

OS Synthetic.

OS Aspergillus oryzae.

PN WO9960136-A1.

XX 25-NOV-1999.

XX 14-MAY-1999; 99WO-US010689.

PR 15-MAY-1998; 98US-00079344.

PR 15-MAY-1998; 98US-00079601.

XX (NOVO ) NOVO NORDISK BIOTECH INC.  
PA (NOVO ) NOVO-NORDISK AS.

PI Wahleithner J, Christensen T;

XX WPI; 2000-062459/05.

DR New isolated Aspergillus oryzae signaling sequences, used to increase the  
XX production of polypeptides by recombinant host filamentous fungal cells.

PS Example 2; Page 35; 78pp; English.

XX Sequences AAZ47342-247353 are oligo(DT12N2) primers used in the  
CC differential display analysis of the Aspergillus oryzae strains HC4.01  
CC and 27. The strains were analysed to find the genetic basis for phenotype  
CC differences in the strains which are used in a method for producing a  
CC polypeptide in an enhanced amount. The method involves cultivating a  
CC mutant of a parent filamentous fungal cell in suitable nutrient medium.  
CC The mutant cell contains the nucleotide sequence encoding the polypeptide  
CC to be synthesised and one or more second nucleotide sequences encoding a  
CC DDC polypeptide (see AAZ47338-247339). The mutant cell produces more of  
CC the polypeptide than the parent cell and the polypeptide can be recovered  
CC from the nutrient medium of the mutant cell. The method can be used for  
CC the production of polypeptides such as hormones, receptors, antibodies,  
CC reporters or enzymes, e.g. an aminopeptidase, amylase, carbohydase,

CC carboxypeptidase, catalase, cellulase, chitinase, cutinase, cyclodextrin  
CC glycosyltransferase, deoxyribonuclease, esterase, alpha-galactosidase,  
CC beta-galactosidase, glucoamylase, alpha-glucosidase, beta-glucosidase,  
CC invertase, laccase, lipase, mannosidase, mutanase, oxidase, pectinolytic  
CC enzyme, peroxidase, phytase, polyphenoloxidase, proteolytic enzyme,  
XX ribonuclease, transglutaminase or xylanase

SQ Sequence 22 BP; 4 A; 3 C; 3 G; 12 T; 0 U; 0 Other;  
Query Match 0.4%; Score 12.6; DB 1; Length 22;  
Best Local Similarity 78.9%; Pred. No. 5.9e+03;  
Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1977 TGAAAAAAGAAAAAGTGTG 1995  
Db 22 TTAAAAAAGAAAAAGCTTG 4

RESULT 5386  
AAH22194/c  
ID AAH22194 standard; DNA; 22 BP.

XX AAH22194;

DT 20-AUG-2001 (first entry)

XX Human hepatocyte auxin related 3'-(T-rich) primer J.

KW Human; hepatocyte; auxin; liver; hepatitis; chronic hepatitis;  
KW liver fibrosis; cirrhosis; liver damage; primer; ss.

OS Homo sapiens.

XX CN1280985-A.

PN 24-JAN-2001.

XX 20-JUL-1999; 99CN-00110801.

XX 20-JUL-1999; 99CN-00110801.

PA (HOSP-) HOSPITAL NO 458 CHINESE PLA.

XX Kong X, Yi X, Zeng P;

XX WPI; 2001-291394/31.

PT Novel recombinant human hepatocyte auxin, its preparation and clinical  
PT application.

PS Example 1; Page 2 (disclosure); 13pp; Chinese.

XX The present invention describes a differential indication PCR (polymerase  
CC chain reaction) technique which is used to obtain a new complete gene  
CC able to promote the repair of damaged liver cells and with substance  
CC total length of 0.7 kb by screening the cDNA library of human foetal  
CC liver. The induction expression of engineering bacteria, the separation  
CC and cracking of inclusion body and the process for restoring and  
CC decontaminating proteins are built up to obtain high purity recombinant  
CC human hepatocyte auxin. It can externally promote the reproduction of  
CC primary culture liver cells and liver cancer cells BEL-7402 and  
CC internally promote the synthesis of mouse liver cell DNA after CCL4 is  
CC damaged and the repair of liver cells. The method may be used to treat  
CC serious hepatitis, chronic hepatitis, liver fibrosis and cirrhosis. The  
CC present sequence represents a primer which is used in the exemplification  
CC of the present invention

SQ Sequence 22 BP; 4 A; 3 C; 3 G; 12 T; 0 U; 0 Other;

Query Match 0.4%; Score 12.6; DB 1; Length 22;  
Best Local Similarity 78.9%; Pred. No. 5.9e+03;  
Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;



Best Local Similarity 71.4%; Pred. No. 5.9e+03;  
Matches 15; Conservative 1; Mismatches 5; Indels 0; Gaps 0;  
QY 2779 AGAATTGAAAAAATAAAAAA 2799  
Db 21 AAATTAACRCATAAAAAA 1

RESULT 5388  
AAS01637  
ID AAS01637 standard; DNA; 22 BP.  
XX  
AC AAS01637;  
XX  
DT 18-JUL-2001 (first entry)  
XX

Human fibrillin-1 (FBN1) 5'-target sequence for bisulfite PCR.  
Human; T-type calcium channel; CACNA1G; cytosine methylation; CpG island;  
cellular proliferative disorder; colorectal cancer; age related disease;  
apolipoprotein B; APOB; caudal type homeobox transcription factor 2;  
CDX2; epidermal growth factor receptor; EGFR; fibrillin-1; FBN1;  
G protein-coupled receptor 37; GPR37; heat shock 70kD protein 6; HSP70B';  
HSPA6; RasGAP-related protein; IQGAP2; proteinase-activated receptor 2;  
PAR2; paired-like homeodomain transcription factor 2; PITX2; klotho; KL;  
patched A; patched B; PTCHA; PTCHB; syndecan 1; syndecan 4; SDC1; SDC4;  
chromosome 15q21; ds.

Homo sapiens.  
WO200119845-A1.  
22-MAR-2001.  
14-SEP-2000; 2000WO-US025479.  
15-SEP-1999; 99US-00398522.  
(UYJO ) UNIV JOHNS HOPKINS SCHOOL MEDICINE.

Issa J;  
WPI; 2001-244777/25.  
New nucleic acid molecule for use as a marker for screening cancer,  
comprises the coding region for a T-type calcium channel and regulatory  
sequences associated with the channel.

Claim 20; Page 37; 125pp; English.

The present sequence for human fibrillin-1 (FBN1) 5'-target sequence  
(complementary to the 5'-bisulfite PCR primer) is used to study the  
methylation state of FBN1 which maps to chromosome 15q21.1. The  
methylation state of specific regions within CpG islands associated with  
a novel T-type calcium channel CACNA1G gene correlate with several  
cancerous phenotypes involving various tissue and cell types. Since  
aberrant methylation of normally unmethylated CpG islands is often  
observed in immortalised and transformed cells, CACNA1G is implicated in  
cellular proliferative disorders e.g. leukaemia, colorectal, lung, breast  
and other cancers. The nucleic acid coding for CACNA1G is useful as a  
marker for screening cancer and age related diseases. A diagnostic kit  
containing primers (AAS01574-AAS01623) for amplification of a CpG-  
containing nucleic acid, where the primer hybridises with a target  
polynucleotide sequence (AAS01627-AAS01676), can be used for detecting  
aberrant methylation. The CpG island sequences (AAS01677-AAS01692) are  
selected from genes encoding CACNA1G, apolipoprotein B (APOB), caudal  
type homeobox transcription factor 2 (CDX2), epidermal growth factor  
receptor (EGFR), FBN1, G protein-coupled receptor 37 (GPR37), heat shock  
70kD protein 6 (HSP70B'; HSPA6), RasGAP-related protein (IQGAP2), klotho  
(KL), proteinase-activated receptor 2 (PAR2), paired-like homeodomain  
transcription factor 2 (PITX2), patched A and B (PTCHA; PTCHB) and  
syndecan 1 and 4 (SDC1; SDC4) or a MINT31 sequence

QY 1977 TGAAAAAAGAAAGTGTG 1995  
Db 22 TTAAAAAAGAAAGCTTG 4

RESULT 5387  
AAS01584/c  
ID AAS01584 standard; DNA; 22 BP.  
XX  
AC AAS01584;  
XX  
DT 18-JUL-2001 (first entry)  
XX

Human fibrillin-1 (FBN1) CpG island 5'-bisulfite PCR primer.

Human; T-type calcium channel; CACNA1G; cytosine methylation; CpG island;  
cellular proliferative disorder; colorectal cancer; age related disease;  
apolipoprotein B; APOB; caudal type homeobox transcription factor 2;  
CDX2; epidermal growth factor receptor; EGFR; fibrillin-1; FBN1;  
G protein-coupled receptor 37; GPR37; heat shock 70kD protein 6; HSP70B';  
HSPA6; RasGAP-related protein; IQGAP2; proteinase-activated receptor 2;  
PAR2; paired-like homeodomain transcription factor 2; PITX2; klotho; KL;  
patched A; patched B; PTCHA; PTCHB; syndecan 1; syndecan 4; SDC1; SDC4;  
chromosome 15q21; PCR primer; ss.

Homo sapiens.  
WO200119845-A1.  
22-MAR-2001.  
14-SEP-2000; 2000WO-US025479.  
15-SEP-1999; 99US-00398522.  
(UYJO ) UNIV JOHNS HOPKINS SCHOOL MEDICINE.

Issa J;  
WPI; 2001-244777/25.  
New nucleic acid molecule for use as a marker for screening cancer,  
comprises the coding region for a T-type calcium channel and regulatory  
sequences associated with the channel.

Claim 21; Page 34; 125pp; English.

The present sequence for 5'-bisulfite PCR primer is used to study the  
methylation state of human fibrillin-1 (FBN1) which maps to chromosome  
15q21.1. The methylation state of specific regions within CpG islands  
associated with a novel T-type calcium channel CACNA1G gene correlate  
with several cancerous phenotypes involving various tissue and cell  
types. Since aberrant methylation of normally unmethylated CpG islands is  
often observed in immortalised and transformed cells, CACNA1G is  
implicated in cellular proliferative disorders e.g. leukaemia,  
colorectal, lung, breast and other cancers. The nucleic acid coding for  
CACNA1G is useful as a marker for screening cancer and age related  
diseases. A diagnostic kit containing primers (AAS01574-AAS01623) for  
amplification of a CpG-containing nucleic acid, where the primer  
hybridises with a target polynucleotide sequence (AAS01627-AAS01676), can  
be used for detecting aberrant methylation. The CpG island sequences  
(AAS01677-AAS01692) are selected from genes encoding CACNA1G,  
apolipoprotein B (APOB), caudal type homeobox transcription factor 2  
(CDX2), epidermal growth factor receptor (EGFR), fibrillin-1 (FBN1), G  
protein-coupled receptor 37 (GPR37), heat shock 70kD protein 6 (HSP70B';  
HSPA6), RasGAP-related protein (IQGAP2), klotho (KL), proteinase-  
activated receptor 2 (PAR2), paired-like homeodomain transcription factor  
2 (PITX2), patched A and B (PTCHA; PTCHB) and syndecan 1 and 4 (SDC1;  
SDC4) or a MINT31 sequence

Sequence 22 BP; 3 A; 0 C; 3 G; 15 T; 0 U; 1 Other;

Query Match 0.4%; Score 12.6; DB 1; Length 22;

SQ Sequence 22 BP; 15 A; 3 C; 0 G; 3 T; 0 U; 1 Other;

Query Match 0.4%; Score 12.6; DB 1; Length 22;  
Best Local Similarity 71.4%; Pred. No. 5.9e+03;  
Matches 15; Conservative 1; Mismatches 5; Indels 0; Gaps 0;

QY 2779 AGAATTGAAAAAAGAAAAA 2799  
Db 2 AAAATTACRCATATAAAAAA 22

RESULT 5389  
AAT28049/c  
ID AAT28049 standard; DNA; 22 BP.  
XX  
AC AAT28049;  
XX  
DT 31-DEC-1996 (first entry)  
XX  
DE 3'-primer F for human fibroblasts.  
XX  
KW Polymerase chain reaction; PCR; primer; amplify; human; fibroblast; AIDS;  
enhanced differential display; EDD; mRNA preparation; senescent cell;  
KW quiescent cell; dividing cell; senescence-related gene; gene expression;  
KW non-senescent cell; age-related lipofuscin; retina; therapy; liver spot;  
KW donor tissue; senescent melanocyte; melanin; hypopigmentation; ss.  
XX  
OS Synthetic.  
XX  
PN WO9613610-A2.  
XX  
PD 09-MAY-1996.  
XX  
PF 24-AUG-1995; 95WO-US011230.  
XX  
PR 31-OCT-1994; 94US-00332420.  
XX  
PA (GERO-) GERON CORP.  
XX  
PI Linskens MHK, Hirsch KS, Villeponteau B, Feng J, Funk W, West MD;  
XX  
DR WPI; 1996-251464/25.  
XX  
PT Identifying, isolating and regulating senescence-related genes - useful  
to ameliorate problems associated with accumulation of senescent cells,  
e.g. age-related lipofuscin accumulation in the retina and AIDS.  
XX  
PS Claim 6; Page 25; 135pp; English.  
XX  
CC AAT28044-T28075 represent primers for human fibroblasts in enhanced  
differential display (EDD), which is used in conjunction with the method  
of the invention. EDD is an mRNA preparation method. AAT28044-T28055  
represent T-rich 3'-primers, while AAT28056-T28075 are randomly selected  
5'-primers used in EDD of human fibroblasts. The 3'-primers used are  
complementary to the poly-A tail of the mRNA. In the method of the  
invention, mRNA is isolated from a senescent cell, and a young quiescent  
cell, and the mRNAs are amplified in separate reaction mixtures. The  
amplified sequences are then separated by size or charge, and the  
products are analysed to identify a gene from young quiescent cells and  
dividing cells, that is present at a different level from senescent  
cells. The method can be used for the rapid and efficient identification  
and isolation of senescence-related genes and gene products, and to  
detect and distinguish between senescent and non-senescent cells. It can  
also be used to destroy cells expressing senescence specific (or related)  
gene products, and to screen for compounds capable of altering gene  
expression in senescent cells. The method can also be used to ameliorate  
problems associated with the accumulation of senescent cells such as age-  
related lipofuscin accumulation in the retina, and in the treatment of  
AIDS. Also, the method can be used to distinguish young cells from  
senescent cells in donor tissue, which is useful in removing senescent  
melanocytes overexpressing melanin which cause hypopigmentation, or liver  
spots

SQ Sequence 22 BP; 3 A; 3 C; 4 G; 12 T; 0 U; 0 Other;

Query Match 0.4%; Score 12.6; DB 1; Length 22;  
Best Local Similarity 78.9%; Pred. No. 5.9e+03;  
Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1977 TGAAAAAAGAAAAAGTGTG 1995  
Db 22 TCAAAAAAAGAAAAAGCTTG 4

RESULT 5390  
AAT58489/c  
ID AAT58489 standard; DNA; 22 BP.  
XX  
AC AAT58489;  
XX  
DT 24-MAR-1997 (first entry)  
XX  
DE First primer #6 for use in enhanced differential display method.  
XX  
KW Differential Display; Enhanced Differential Display; EDD; screening;  
gene expression; cell type; different; cell development; gene typing;  
KW identification; differentiation; aging; and disease; primer; PCR; ss.  
XX  
OS Synthetic.  
XX  
PN US5580726-A.  
XX  
PD 03-DEC-1996.  
XX  
PF 29-APR-1994; 94US-00235180.  
XX  
PR 29-APR-1994; 94US-00235180.  
XX  
PA (GERO-) GERON CORP.  
XX  
PI Linskens MHK, Feng J, Villeponteau B, Funk W;  
XX  
DR WPI; 1997-033564/03.  
XX  
PT Detection of differentially expressed mRNA mols. - using two-step  
polymerase chain reaction amplification method.  
XX  
PS Claim 9; Col 15; 15pp; English.  
XX  
CC An improved method of Differential Display, named Enhanced Differential  
Display (EDD) has been designed as a technique for screening differences  
in gene expression between various cell types or between different stages  
of cell development. The technique is highly reproducible, leading to  
precise typing of the expressed genes in any given cell. EDD analysis  
permits the identification of novel genes involved in differentiation,  
aging and disease, and enables direct comparisons of different cell types  
and disease states. By using longer primers, and/or an alteration in the  
annealing temperatures, the number of false positives can be reduced.  
CC First, cDNA is prepared from total cellular RNA using 12 different 22-  
base oligonucleotides (AAT58484-95) that are targeted to the poly A tail  
of pol II mRNA transcripts. The last two bases of each primer varies so  
as to anchor the primer to the 3' end of different sets of mRNAs. A  
second set of 12 22-base oligo primers (AAT58472-83) is designed to  
randomly select a subset of cDNAs from each of the twelve 3' primers. PCR  
amplification of a subset of cDNAs is carried out in a two step process  
using particular 5' and 3' primers. The amplified gene products can then  
be directly sequenced or rapidly subcloned for DNA sequencing

Sequence 22 BP; 3 A; 3 C; 4 G; 12 T; 0 U; 0 Other;

Query Match 0.4%; Score 12.6; DB 1; Length 22;  
Best Local Similarity 78.9%; Pred. No. 5.9e+03;  
Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1977 TGAAAAAAGAAAAAGTGTG 1995  
Db 22 TCAAAAAAAGAAAAAGCTTG 4

Db 22 TCAAAAAAAAAAAGCTTG 4

RESULT 5391  
AAZ47347/c

ID AAZ47347 standard; DNA; 22 BP.

XX

AC AAZ47347;

XX

DT 06-MAR-2000 (first entry)

XX

DE PCR primer F used in differential display analysis of Aspergillus oryzae.

XX

KW Dopa decarboxylase; DDC2; DDC3; increased yield; hormone; receptor;

KW antibody; reporter; enzyme; polypeptide production; primer; ss.

XX

OS Synthetic.

OS Aspergillus oryzae.

XX

PN WO9960136-A1.

XX

PD 25-NOV-1999.

XX

PF 14-MAY-1999; 99WO-US010689.

XX

PR 15-MAY-1998; 98US-00079344.

PR 15-MAY-1998; 98US-00079601.

XX

PA (NOVO ) NOVO NORDISK BIOTECH INC.

PA (NOVO ) NOVO-NORDISK AS.

XX

PI Wahleithner J, Christensen T;

XX

DR WPI; 2000-062459/05.

XX

PT New isolated Aspergillus oryzae signaling sequences, used to increase the

PT production of polypeptides by recombinant host filamentous fungal cells.

XX

PS Example 2; Page 35; 78pp; English.

XX

CC Sequences AAZ47342-Z47353 are oligo(dT12N2) primers used in the

CC differential display analysis of the Aspergillus oryzae strains HC4.01

CC and 27. The strains were analysed to find the genetic basis for phenotype

CC differences in the strains which are used in a method for producing a

CC polypeptide in an enhanced amount. The method involves cultivating a

CC mutant of a parent filamentous fungal cell in suitable nutrient medium.

CC The mutant cell contains the nucleotide sequence encoding the polypeptide

CC to be synthesised and one or more second nucleotide sequences encoding a

CC DDC polypeptide (see AAZ47338-Z47339). The mutant cell produces more of

CC the polypeptide than the parent cell and the polypeptide can be recovered

CC from the nutrient medium of the mutant cell. The method can be used for

CC the production of polypeptides such as hormones, receptors, antibodies,

CC reporters or enzymes, e.g. an aminopeptidase, amylase, carboxydrase,

CC carboxypeptidase, catalase, cellulase, chitinase, cutinase, cyclodextrin

CC glycosyltransferase, deoxyribonuclease, esterase, alpha-galactosidase,

CC beta-galactosidase, glucoamylase, alpha-glucosidase, beta-glucosidase,

CC invertase, laccase, lipase, mannosidase, mutanase, oxidase, pectinolytic

CC enzyme, peroxidase, phytase, polyphenoloxidase, proteolytic enzyme,

CC ribonuclease, transglutaminase or xylanase

XX

SQ Sequence 22 BP; 3 A; 3 C; 4 G; 12 T; 0 U; 0 Other;

Query Match 0.4%; Score 12.6; DB 1; Length 22;

Best Local Similarity 78.9%; Pred. No. 5.9e+03;

Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1977 TGAAGAAAAAGAAAGCTTG 1995

Db 22 TCAAGAAAAAGAAAGCTTG 4

RESULT 5392  
AAH22190/c

AAH22190 standard; DNA; 22 BP.

AAH22190;

20-AUG-2001 (first entry)

Human hepatocyte auxin related 3'-(T-rich) primer F.

Human; hepatocyte; auxin; liver; hepatitis; chronic hepatitis;

liver fibrosis; cirrhosis; liver damage; primer; ss.

Homo sapiens.

CN1280985-A.

24-JAN-2001.

20-JUL-1999; 99CN-00110801.

20-JUL-1999; 99CN-00110801.

(HOSP-) HOSPITAL NO 458 CHINESE PLA.

Kong X, Yi X, Zeng P;

WPI; 2001-291394/31.

Novel recombinant human hepatocyte auxin, its preparation and clinical

application.

Example 1; Page 2 (disclosure); 13pp; Chinese.

The present invention describes a differential indication PCR (polymerase

chain reaction) technique which is used to obtain a new complete gene

able to promote the repair of damaged liver cells and with substance

total length of 0.7 kb by screening the cDNA library of human foetal

liver. The induction expression of engineering bacteria, the separation

and cracking of inclusion body and the process for restoring and

decontaminating proteins are built up to obtain high purity recombinant

human hepatocyte auxin. It can externally promote the reproduction of

primary culture liver cells and liver cancer cells BEL-7402 and

internally promote the synthesis of mouse liver cell DNA after CCL4 is

damaged and the repair of liver cells. The method may be used to treat

serious hepatitis, chronic hepatitis, liver fibrosis and cirrhosis. The

present sequence represents a primer which is used in the exemplification

of the present invention

Sequence 22 BP; 3 A; 3 C; 4 G; 12 T; 0 U; 0 Other;

Query Match 0.4%; Score 12.6; DB 1; Length 22;

Best Local Similarity 78.9%; Pred. No. 5.9e+03;

Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1977 TGAAGAAAAAGAAAGCTTG 1995

Db 22 TCAAGAAAAAGAAAGCTTG 4

RESULT 5393  
AAV47448/c

ID AAV47448 standard; DNA; 22 BP.

XX

AC AAV47448;

XX

DT 10-NOV-1998 (first entry)

XX

DE Antisense oligonucleotide 2, targeting adenosine A2b receptor.

XX

KW Secondary structure; mRNA; phosphorothioate backbone; G-protein;

KW bronchoconstriction; lung inflammation; asthma; pulmonary disease;

KW allergy; emphysema; cystic fibrosis; ss.

XX

OS Synthetic.











```

XX 21-JAN-1999.
XX PD
XX XX
XX PF 14-JUL-1997; 97DE-01030066.
XX XX
XX PR 14-JUL-1997; 97DE-01030066.
XX XX
XX PA (BADI ) BASF AG.
XX XX
XX PI Seulberger H, Lerchl J, Schmidt R, Kurpinska K, Falk J;
XX DR WPI; 1999-096742/09.
XX XX
XX PT DNA encoding barley hydroxyphenylpyruvate dioxygenase - for producing
XX PT plants with increased vitamin E content, etc.
XX XX
XX PS Example 1; Page 9; 26pp; German.
XX XX
XX CC AAX02695-X02708 are primers used in the isolation of a novel barley
XX CC (Hordeum vulgare) hydroxyphenylpyruvate dioxygenase (HPPD) protein. This
XX CC protein is useful for plant transformation to produce transgenic plants
XX CC especially where an expression cassette is introduced into a plant cell,
XX CC callus tissue, a whole plant or protoplasts by Agrobacterium tumefaciens
XX CC transformation, electroporation or particle bombardment and where the
XX CC plants are selected from soya, barley, wheat, oilseed rape, maize and
XX CC sunflower, or where the DNA is expressed in tobacco plants, especially in
XX CC leaves or seeds
XX XX
XX SQ Sequence 14 BP; 1 A; 1 C; 0 G; 12 T; 0 U; 0 Other;

Query Match 0.4%; Score 12.4; DB 1; Length 14;
Best Local Similarity 92.9%; Pred. No. 3.6e+03;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2174 TTTT TTTT TTTT TTTT TTTT TTTT TTTT TTTT TTTT TTTT TTTT TTTT TTTT TTTT TTTT
Db 1 TTTT TTTT TTTT TTTT TTTT TTTT TTTT TTTT TTTT TTTT TTTT TTTT TTTT TTTT TTTT

RESULT 5402
AAX19465/c
ID AAX19465 standard; DNA; 14 BP.
XX XX
XX AC AAX19465;
XX DT
XX XX
XX DE 21-MAY-1999 (first entry)
XX XX
XX KW Human senescence factor p23 T12 anchor primer SEQ ID NO:7.
XX KW Human; senescence factor; p23; cancer; persistent inflammation;
XX KW proliferative disorder; degenerative disorder; primer; ss.
XX OS Synthetic.
XX OS Homo sapiens.
XX XX
XX PN WO9907893-A1.
XX XX
XX PD 18-FEB-1999.
XX XX
XX PF 05-AUG-1998; 98WO-US016343.
XX XX
XX PR 08-AUG-1997; 97US-00908873.
XX XX
XX PA (UNIW ) UNIV WASHINGTON.
XX XX
XX PI Swisshelm K, Hosier S, Kubbies M;
XX XX
XX DR WPI; 1999-167454/14.
XX XX
XX PT Newly isolated nucleic acid molecule (designated p23) encoding a p23
XX PT polypeptide - useful for inducing a senescence phenotype in a cell.
XX XX
XX PS Example 1; Page 18; 44pp; English.

```

XX The present invention describes human senescence factor p23. An  
CC expression vector for p23 is useful for inducing a senescent phenotype in  
CC a cell (preferably eukaryotic). This may help in regulating diseases,  
CC including cancer, persistent inflammation, and various proliferative and  
CC degenerative disorders. These transgenic cells are useful in gene therapy  
CC for treating cancer, particularly where antisense oligonucleotides are  
CC useful for blocking normal or mutant p23 expression in cancer cells or  
CC other proliferating cells. Transgenic cells are also useful for producing  
CC the p23 polypeptide in large quantities. The antibodies are useful for  
CC raising antiserum against p23, and for identifying senescent cells in  
CC culture and tissue biopsies. The p23 polynucleotides are useful for  
CC modulating or altering p23 activity in a cell, and for identifying and/or  
CC detecting chromosomal rearrangements in chromosome 3 in a human cell. The  
CC isolation of the p23 polynucleotide permits the manipulation of malignant  
CC growth in cancer. The present sequence represents a primer used in an  
CC example from the present invention

SQ Sequence 14 BP; 2 A; 0 C; 0 G; 12 T; 0 U; 0 Other;  
Query Match 0.4%; Score 12.4; DB 1; Length 14;  
Best Local Similarity 92.9%; Pred. No. 3.6e+03;  
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2783 TTGAAAAA 2796  
Db 14 TTA 1

RESULT 5403  
AAX19467  
ID AAX19467 standard; DNA; 14 BP.  
XX AAX19467;  
AC AAX19467;  
XX 21-MAY-1999 (first entry)  
XX Human senescence factor p23 T12 anchor primer SEQ ID NO:9.  
DE Human; senescence factor; p23; cancer; persistent inflammation;  
XX proliferative disorder; degenerative disorder; primer; ss.  
KW Synthetic.  
KW Homo sapiens.  
XX WO9907893-A1.  
XX 18-FEB-1999.  
XX 05-AUG-1998; 98WO-US016343.  
XX 08-AUG-1997; 97US-00908873.  
XX (UNIW ) UNIV WASHINGTON.  
XX Swisshelm K, Hosier S, Kubbies M;  
XX WPI; 1999-167454/14.  
XX Newly isolated nucleic acid molecule (designated p23) encoding a p23  
PT polypeptide - useful for inducing a senescence phenotype in a cell.  
XX Example 1; Page 18; 44pp; English.

CC The present invention describes human senescence factor p23. An  
CC expression vector for p23 is useful for inducing a senescent phenotype in  
CC a cell (preferably eukaryotic). This may help in regulating diseases,  
CC including cancer, persistent inflammation, and various proliferative and  
CC degenerative disorders. These transgenic cells are useful in gene therapy

CC for treating cancer, particularly where antisense oligonucleotides are  
CC useful for blocking normal or mutant p23 expression in cancer cells or  
CC other proliferating cells. Transgenic cells are also useful for producing  
CC the p23 polypeptide in large quantities. The antibodies are useful for  
CC raising antiserum against p23, and for identifying senescent cells in  
CC culture and tissue biopsies. The p23 polynucleotides are useful for  
CC modulating or altering p23 activity in a cell, and for identifying and  
CC isolating the whole gene encoding p23, and variants of p23. Assays based  
CC on p23 elements, which detect p23 levels and activity are useful as  
CC diagnostic markers for staging tumours, determining prognosis, and/or  
CC predicting therapeutic success. These elements also provide an assay for  
CC detecting chromosomal rearrangements in chromosome 3 in a human cell. The  
CC isolation of the p23 polynucleotide permits the manipulation of malignant  
CC growth in cancer. The present sequence represents a primer used in an  
CC example from the present invention

SQ Sequence 14 BP; 1 A; 1 C; 0 G; 12 T; 0 U; 0 Other;  
Query Match 0.4%; Score 12.4; DB 1; Length 14;  
Best Local Similarity 92.9%; Pred. No. 3.6e+03;  
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2174 TTTT 2187  
Db 1 TTTT 14

RESULT 5404  
ABL88471/c  
ID ABL88471 standard; DNA; 14 BP.  
XX ABL88471;  
AC ABL88471;  
XX 16-MAY-2002 (first entry)  
XX Oligo dT 3P1 primer 1.

KW Pain; analgesic; gene therapy; neurological disorder;  
KW neurodegenerative disease; primer; ss.

OS Synthetic.  
XX WO200212338-A2.  
XX 14-FEB-2002.  
XX 03-AUG-2001; 2001WO-EP009011.  
XX 03-AUG-2000; 2000DE-01037759.

PA (CHEF ) GRUENENTHAL GMBH.  
XX Gillen C, Wetzels I, Wnendt S, Weihe E, Schaefer MK;  
XX WPI; 2002-257469/30.

PT Identifying pain-regulating compounds, useful for treating chronic pain  
PT and for diagnosis, by measuring binding of compounds to specific peptides  
PT and proteins.

PS Example 1; Page 62; 213pp; German.

XX The invention relates to identifying pain-regulating substances (A)  
CC comprises (i) incubating a test substance with a cell (or preparation  
CC from it) that has synthesised a peptide or protein (B) and (ii) measuring  
CC either binding of the test substance to (B) or some functional parameter  
CC that is altered by this binding. The method is useful for identifying  
CC pain-regulating substances (A) with analgesic activity. (A) along with  
CC nucleic acid (ABL88411-ABL88441) that encode proteins (B, ABB85006-  
CC ABB85037) that interact with (A); (B); vectors containing the nucleic  
CC acid; antibodies against (B); cells that express (B) and agents that bind  
CC to (B); are all useful for treating pain, particularly chronic pain,  
CC including use in gene therapy. The same materials can also be used for



CC diagnosis, e.g. of neurological and neurodegenerative diseases. The  
CC present sequence is that of a PCR primer, used in examples of the  
CC invention  
XX  
SQ Sequence 14 BP; 2 A; 0 C; 0 G; 12 T; 0 U; 0 Other;  
  
Query Match 0.4%; Score 12.4; DB 1; Length 14;  
Best Local Similarity 92.9%; Pred. No. 3.6e+03;  
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
  
QY 2783 TTGAAAAA 2796  
|||  
Db 14 TTA 1

RESULT 5405  
AAD24496  
ID AAD24496 standard; DNA; 14 BP.  
XX  
AC AAD24496;  
XX  
DT 07-MAR-2002 (first entry)  
XX  
DE Retinoid-regulated gene isolating poly(T) PCR primer #10.  
XX  
KW Retinoid metabolism; retinoic acid; RA; haeme-binding motif; vitamin A;  
KW cytochrome P450; prostate cancer; drug screening; PCR primer;  
KW retinoid-regulated gene; ss.  
XX  
OS Unidentified.  
XX  
PN US6306624-B1.  
XX  
PD 23-OCT-2001.  
XX  
DE Retinoid-regulated gene isolating poly(T) PCR primer #10.  
XX  
KW Retinoid metabolism; retinoic acid; RA; haeme-binding motif; vitamin A;  
KW cytochrome P450; prostate cancer; drug screening; PCR primer;  
KW retinoid-regulated gene; ss.  
XX  
OS Unidentified.  
XX  
PN US6306624-B1.  
XX  
PD 23-OCT-2001.  
XX  
PF 25-JUN-1997; 97US-00882164.  
XX  
PR 21-JUN-1996; 96US-00667546.  
PR 01-OCT-1996; 96US-00724466.  
PR 23-JUN-1997; 97WO-CA000440.  
XX  
PA (TOOH ) UNIV QUEENS KINGSTON.  
XX  
PI Petkovich PM, White JA, Beckett BR, Jones G;  
XX  
DR WPI; 2002-033254/04.  
XX  
PT New DNA fragments having promoter activity, useful in retinoid  
PT metabolism, as well as in producing retinoic acid metabolizing cytochrome  
PT P450s that are useful as targets for the treatment of certain cancers.  
XX  
PS Disclosure; Col 13; 75pp; English.  
XX  
CC The present invention relates to retinoid (e.g., retinoic acid (RA),  
CC vitamin A) metabolising proteins and nucleic acid sequences encoding  
CC them. RA metabolising proteins contain a haeme-binding motif which is  
CC characteristic of the group of proteins known as cytochrome P450s. The  
CC sequences of the invention are useful in retinoid metabolism and in  
CC producing retinoic acid metabolising cytochrome P450s. They are  
CC particularly useful as targets for the treatment of certain cancers such  
CC as prostate cancer. The invention also relates to a method of screening  
CC drugs for their effect on activity of RA inducible proteins. The present  
CC DNA sequence is poly(T) PCR primer which is used for isolating retinoid  
CC regulating genes by differential display of mRNAs  
XX  
SQ Sequence 14 BP; 1 A; 1 C; 0 G; 12 T; 0 U; 0 Other;  
  
Query Match 0.4%; Score 12.4; DB 1; Length 14;  
Best Local Similarity 92.9%; Pred. No. 3.6e+03;  
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
  
QY 2174 TTTT 2187  
|||||

Db 1 TTTTTC 14  
  
RESULT 5406  
AAD24492/c  
ID AAD24492 standard; DNA; 14 BP.  
XX  
AC AAD24492;  
XX  
DT 07-MAR-2002 (first entry)  
XX  
DE Retinoid-regulated gene isolating poly(T) PCR primer #6.  
XX  
KW Retinoid metabolism; retinoic acid; RA; haeme-binding motif; vitamin A;  
KW cytochrome P450; prostate cancer; drug screening; PCR primer;  
KW retinoid-regulated gene; ss.  
XX  
OS Unidentified.  
XX  
PN US6306624-B1.  
XX  
PD 23-OCT-2001.  
XX  
PF 25-JUN-1997; 97US-00882164.  
XX  
PR 21-JUN-1996; 96US-00667546.  
PR 01-OCT-1996; 96US-00724466.  
PR 23-JUN-1997; 97WO-CA000440.  
XX  
PA (TOOH ) UNIV QUEENS KINGSTON.  
XX  
PI Petkovich PM, White JA, Beckett BR, Jones G;  
XX  
DR WPI; 2002-033254/04.  
XX  
PT New DNA fragments having promoter activity, useful in retinoid  
PT metabolism, as well as in producing retinoic acid metabolizing cytochrome  
PT P450s that are useful as targets for the treatment of certain cancers.  
XX  
PS Disclosure; Col 13; 75pp; English.  
XX  
CC The present invention relates to retinoid (e.g., retinoic acid (RA),  
CC vitamin A) metabolising proteins and nucleic acid sequences encoding  
CC them. RA metabolising proteins contain a haeme-binding motif which is  
CC characteristic of the group of proteins known as cytochrome P450s. The  
CC sequences of the invention are useful in retinoid metabolism and in  
CC producing retinoic acid metabolising cytochrome P450s. They are  
CC particularly useful as targets for the treatment of certain cancers such  
CC as prostate cancer. The invention also relates to a method of screening  
CC drugs for their effect on activity of RA inducible proteins. The present  
CC DNA sequence is poly(T) PCR primer which is used for isolating retinoid  
CC regulating genes by differential display of mRNAs  
XX  
SQ Sequence 14 BP; 2 A; 0 C; 0 G; 12 T; 0 U; 0 Other;  
  
Query Match 0.4%; Score 12.4; DB 1; Length 14;  
Best Local Similarity 92.9%; Pred. No. 3.6e+03;  
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
  
QY 2783 TTGAAAAA 2796  
|||  
Db 14 TTA 1

RESULT 5407  
AAT52144  
ID AAT52144 standard; RNA; 15 BP.  
XX  
AC AAT52144;  
XX  
DT 25-MAR-2003 (revised)  
DT 25-MAR-1997 (first entry)  
XX





PD 25-JAN-2001.  
XX  
PF 17-JUL-2000; 2000WO-CA0000824.  
XX  
PR 15-JUL-1999; 99US-0144004P.  
XX  
PA (UYMC-) UNIV MCGILL.  
XX  
PI Fundytus ME, Coderre TJ, Cohen SR, Henry JL, Vainio A;  
XX  
DR WPI; 2001-159534/16.  
XX  
PT New antisense oligonucleotides to metabotropic glutamate receptor type 1  
PT gene, which specifically hybridize to mRNA expressed from the gene useful  
PT for treating disorders related to elevated glutamate level such as pain.  
XX  
PS Claim 2; Page 18; 97pp; English.  
XX  
CC The present invention relates to an antisense oligonucleotide derived  
CC from the sequence of metabotropic glutamate receptor type 1 (mGluR1)  
CC gene. The antisense oligonucleotide binds to a portion of mRNA expressed  
CC from the gene or its splice variant. The binding of the oligonucleotide  
CC to the mRNA is effective in decreasing the translation of the mRNA in a  
CC host cell expressing the gene. The oligonucleotides are useful for  
CC treating chronic pain caused by injury or inflammation of a nerve caused  
CC by arthritis. The oligonucleotides may be used with an opioid analgesic.  
CC They are also useful for minimizing glutamate neurotoxicity and/or  
CC excitotoxicity associated with stroke, ischemia, CNS trauma,  
CC neurodegenerative disorders, gastrointestinal disorders or to inhibit  
CC tumour formation  
XX  
SQ Sequence 18 BP; 13 A; 1 C; 4 G; 0 T; 0 U; 0 Other;  
  
Query Match 0.4%; Score 12.4; DB 1; Length 18;  
Best Local Similarity 92.9%; Pred. No. 5.4e+03;  
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
  
Qy 2785 GAAAAAATAAAAAA 2798  
Db 1 GAAAAAATAAAAAA 14  
  
RESULT 5412  
ABA02214  
ID ABA02214 standard; DNA; 20 BP.  
XX  
AC ABA02214;  
XX  
DT 12-FEB-2002 (first entry)  
XX  
DE Human/mouse C/EBP phosphorothioate antisense oligonucleotide, SEQ ID:26.  
XX  
KW Human; C/EBP alpha; CCAAT/enhancer-binding protein alpha; CEBPA;  
KW transcription factor; tissue development; cellular function;  
KW proliferation; differentiation; adipocyte; energy metabolism;  
KW chondrogenic; ovulation; follicular development;  
KW hepatic steroid-induced cell cycle arrest; GLUT2 promoter regulation;  
KW hormonal metabolic regulation; granulocyte development; cancer;  
KW tumour formation; infection; inflammation; expression inhibition;  
KW antisense therapy; quantitative real-time PCR primer; ss.  
XX  
OS Homo sapiens.  
OS Mus musculus.  
XX  
FH Key Location/Qualifiers  
FT modified\_base 1..20  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "Phosphorothioate linkages"  
FT 1..5  
FT /\*tag= b  
FT /mod\_base= OTHER  
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides. All 2' MOE

FT cytosines are 5-methylcytosine"  
FT 16..20  
FT /\*tag= c  
FT /mod\_base= OTHER  
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides. All 2' MOE  
FT cytosines are 5-methylcytosine"  
XX  
PN US6306655-B1.  
XX  
PD 23-OCT-2001.  
XX  
PF 13-JUN-2000; 2000US-00593589.  
XX  
PR 13-JUN-2000; 2000US-00593589.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Monia BP, Butler MM, Wyatt J;  
XX  
DR WPI; 2002-040202/05.  
XX  
PT New antisense oligonucleotides for modulating the expression of  
PT CCAAT/Enhancer-binding proteins alpha, particularly useful for  
PT preventing, delaying or treating infection, inflammation or tumor  
PT formation.  
XX  
PS Claim 1; Col 42; 44pp; English.  
XX  
CC Sequences ABA02205-ABA02282 represent antisense oligonucleotides targeted  
CC to the human CCAAT/enhancer-binding protein alpha (C/EBP alpha) gene,  
CC which inhibit its expression. The antisense oligonucleotides were  
CC designed to target different regions of the human C/EBP alpha RNA, and  
CC were analysed for their effect on C/EBP alpha mRNA levels by quantitative  
CC real-time PCR. A similar investigation on mouse C/EBP alpha expression  
CC was performed using a subset of the antisense oligonucleotides that were  
CC capable of hybridising to mouse C/EBP alpha mRNA. The C/EBP family of  
CC proteins are a family of transcription factors which regulate the  
CC expression of wide range of genes that control normal tissue development,  
CC cellular function, cellular proliferation and functional differentiation.  
CC C/EBP alpha (also known as CEBPA) is primarily found in tissues involved  
CC in energy metabolism which have a capacity to metabolise lipids,  
CC cholesterol and other sterols. It is thought to be involved in the  
CC regulation of adipocyte and chondrogenic differentiation, and is also  
CC involved in follicular development and ovulation, steroid-induced cell  
CC cycle arrest in the liver, in controlling glucose transporter GLUT2  
CC promoter activity, in the hormonal regulation of metabolism, and in  
CC granulocyte development. The oligonucleotides of the invention are useful  
CC for diagnosis, prevention and treatment of conditions associated with  
CC C/EBP expression, such as cancer, tumour formation, infection, or  
CC inflammation  
XX  
SQ Sequence 20 BP; 4 A; 7 C; 6 G; 3 T; 0 U; 0 Other;  
  
Query Match 0.4%; Score 12.4; DB 1; Length 20;  
Best Local Similarity 92.9%; Pred. No. 5.9e+03;  
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
  
Qy 378 AGTCGGCCGACCCC 391  
Db 7 AGTCGGCCGACTCC 20  
  
RESULT 5413  
ABZ86522  
ID ABZ86522 standard; DNA; 20 BP.  
XX  
AC ABZ86522;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human oligonucleotide sequence.  
XX  
KW Human; antisense; lung dysfunction; nasal airway dysfunction;



KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
XX  
OS Homo sapiens.  
XX  
PN WO200285308-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013135.  
XX  
PR 24-APR-2001; 2001US-0286137P.  
XX  
PA (EPIG-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
DR WPI; 2003-229219/22.  
XX  
PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
PS Claim 15; SEQ ID NO 1764; 872pp; English.  
XX  
CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 15 A; 1 C; 3 G; 1 T; 0 U; 0 Other;  
  
Query Match 0.4%; Score 12.4; DB 1; Length 20;  
Best Local Similarity 92.9%; Pred. No. 5.9e+03;  
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
  
QY 1977 TGAAGAAAGAGAAA 1990  
Db 6 TGAACAAAGAGAAA 19  
  
RESULT 5414  
ABQ84589/C  
ID ABQ84589 standard; DNA; 20 BP.  
XX  
AC ABQ84589;  
XX  
DT 20-FEB-2003 (first entry)  
XX  
DE DPP10 related PSQ assay oligonucleotide #74.  
XX  
KW DPP10; dipeptidyl peptidase; prolyloloigopeptidase; enzyme; asthma;

KW antiinflammatory; antiasthmatic; antipsoriatic; antiarthritic;  
KW antirheumatic; vaccine; gene therapy; inflammatory disease;  
KW inflammatory bowel disease; atopy; rheumatoid arthritis; psoriasis;  
KW chromosome 2q14; PCR primer; ss.  
XX  
OS Synthetic.  
XX  
PN WO200286113-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 24-APR-2002; 2002WO-GB001887.  
XX  
PR 24-APR-2001; 2001GB-00010044.  
PR 24-APR-2001; 2001GB-00010046.  
PR 12-OCT-2001; 2001GB-00024575.  
PR 12-OCT-2001; 2001GB-00024594.  
XX  
PA (ISIS-) ISIS INNOVATIONS LTD.  
XX  
PI Cookson WOCM, Moffat MF, Allen M, Lench N;  
XX  
DR WPI; 2003-093132/08.  
XX  
PT New nucleic acid sequence comprising DPP10 mRNA, useful for the  
PT manufacture of a medicament for regulating DPP10 protein expression or  
PT for preventing or treating inflammatory disease e.g., inflammatory bowel  
PT disease.  
XX  
PS Disclosure; Page 321; 321pp; English.  
XX  
CC The present invention describes a new isolated nucleic acid sequence (I)  
CC comprising a DPP10 mRNA sequence. DPP10 is a dipeptidyl peptidase (also  
CC known as prolyloloigopeptidase). (I) has antiinflammatory, antiasthmatic,  
CC antipsoriatic, antiarthritic and antirheumatic activities, and can be  
CC used in vaccines and gene therapy. A composition comprising (I) can be  
CC used for the manufacture of a medicament for regulating DPP10 expression  
CC or for preventing or treating inflammatory disease e.g., inflammatory  
CC bowel disease, asthma, atopy, rheumatoid arthritis or psoriasis. (I) can  
CC also be used in an assay for detecting or measuring DPP10 in a sample. A  
CC host cell comprising (I) can be used for producing recombinant DPP10 gene  
CC products, or in drug screening systems to identify agents for diagnosis  
CC or treatment of individuals having or susceptible to inflammatory  
CC disease. Human DPP10 is located on chromosome 2, more specifically  
CC chromosome 2q14. ABQ84254 to ABQ84612 and ABP55569 to ABP55629 represent  
CC sequences used in the exemplification of the present invention  
XX  
SQ Sequence 20 BP; 9 A; 2 C; 2 G; 7 T; 0 U; 0 Other;  
  
Query Match 0.4%; Score 12.4; DB 1; Length 20;  
Best Local Similarity 92.9%; Pred. No. 5.9e+03;  
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
  
QY 2414 GGTCGTGTAATACT 2427  
Db 20 GGTCCTTTAAATACT 7  
  
RESULT 5415  
AAZ26823/C  
ID AAZ26823 standard; DNA; 21 BP.  
XX  
AC AAZ26823;  
XX  
DT 30-NOV-1999 (first entry)  
XX  
DE Human polymorphic region 1012.  
XX  
KW Polymorphism; human; inhibitor; cancer; treatment; cell growth; LOH;  
KW cell viability; loss of heterozygosity; precancerous condition; ASI;  
KW allele specific inhibitor; somatic cell; diagnosis; prevention;  
KW atherosclerotic plaque; premalignant metaplastic lesion; endometriosis;  
KW dysplastic lesion; benign tumour; polycystic kidney disease; transplant;

KW graft versus host disease; malignant cell removal; bone marrow; ss.  
XX Homo sapiens.  
OS WO9841648-A2.  
XX 24-SEP-1998.  
XX 19-MAR-1998; 98WO-US005419.  
XX 20-MAR-1997; 97US-0041057P.  
XX (VARI-) VARIAGENICS INC.  
PA Housman D, Ledley FD, Stanton VP;  
XX WPI; 1998-521232/44.  
XX Identifying target genes for allele-specific drugs - used for diagnosis,  
PT prevention and treatment of, e.g. cancers, atherosclerotic plaque,  
PT dysplastic lesions, endometriosis or graft versus host disease.  
XX Disclosure; Fig 7; 605pp; English.  
PS This invention describes a novel method for identifying an inhibitor  
XX potentially useful for treatment of cancer, where the inhibitor is active  
CC on a gene vital for cell growth or viability, and where the gene is  
CC subject to loss of heterozygosity (LOH) in a cancer. The inhibitor is  
CC used for preventing the development of cancer in a patient having a  
CC precancerous condition, by administering to the patient a first allele  
CC specific inhibitor (ASI) targeted to an allele of a first essential gene  
CC present in cells of the precancerous condition, where the normal somatic  
CC cells of the patient are heterozygous for the first gene, the inhibitor  
CC is active on at least one but less than all allelic forms of the gene  
CC present in a population and targets only one allelic form present in the  
CC normal somatic cells, and the first gene. The products and methods can be  
CC used in the diagnosis, prevention and treatment of LOH disorders, e.g.  
CC cancers, atherosclerotic plaques, premalignant metaplastic or dysplastic  
CC lesions, benign tumours, endometriosis, polycystic kidney disease, and  
CC graft versus host disease. The method can also be used to remove  
CC malignant cells from bone marrow transplants. AAZ25812-226825 represent  
XX human polymorphic sites described in the method of the invention  
SQ Sequence 21 BP; 9 A; 0 C; 1 G; 11 T; 0 U; 0 Other;  
Query Match 0.4%; Score 12.4; DB 1; Length 21;  
Best Local Similarity 92.9%; Pred. No. 6e+03;  
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 2783 TTGAAAAA 2796  
Db 14 TTTAAAAA 1  
RESULT 5416  
AAT14900/c  
ID AAT14900 standard; cDNA to mRNA; 21 BP.  
XX AAT14900;  
AC AAT14900;  
XX 18-JUL-1996 (first entry)  
XX Primer 6 for 3' porcine zona pellucida gene amplification.  
DE PZP-3; porcine zona pellucida 3; contraceptive vaccine; antigen;  
XX PZP-3(258); primer; PCR; polymerase chain reaction; ss.  
KW PZP-3(258); primer; PCR; polymerase chain reaction; ss.  
XX Synthetic.  
OS JP06179698-A.  
XX 28-JUN-1994.  
XX

PF 15-DEC-1992; 92JP-00353992.  
XX 15-DEC-1992; 92JP-00353992.  
PR (TOFU) TONEN CORP.  
XX WPI; 1994-245693/30.  
DR pig zona pellucida-3 related peptide(s) - useful as contraceptive vaccine  
XX antigen.  
XX Example 1; Page 6; 14pp; Japanese.  
PS AAT14897-99 were each used with AAT14900 to PCR amplify DNA 3' of the  
XX recombinant PZP-3(258) partial porcine zona pellucida 3 gene. A 300 bp  
CC PCR product (AAT14901) was generated by all 3 PCR reactions. The  
CC recombinant protein, PZP-3(258) (AAR96951) corresponds to residues 106-  
CC 363 of PZP-3. Peptides wholly or partially related to PZP-3 (AAR96950),  
CC partic. between amino acids 106-363 (see AAR96951), are useful as  
CC contraceptive vaccine antigens for pigs. See AAT14895-908  
XX Sequence 21 BP; 3 A; 3 C; 2 G; 13 T; 0 U; 0 Other;  
SQ Query Match 0.4%; Score 12.4; DB 1; Length 21;  
Best Local Similarity 92.9%; Pred. No. 6e+03;  
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 1979 AAAAAAGAAAAGT 1992  
Db 21 AAAAAAGAAAAGT 8  
RESULT 5417  
AAQ56046/c  
ID AAQ56046 standard; DNA; 21 BP.  
XX AAQ56046;  
AC AAQ56046;  
XX 09-SEP-1994 (first entry)  
DT Primer 5 to isolate feline zona pellucida FZP-3 coding sequence.  
XX Cat; feline zona pellucida; FZP-3; antigen; contraceptive vaccine; PCR;  
DE polymerase chain reaction; primer; ss.  
KW Synthetic.  
XX JP06014784-A.  
XX 25-JAN-1994.  
XX 27-NOV-1992; 92JP-00341429.  
XX 29-NOV-1991; 91JP-00342317.  
XX (TOFU) TONEN CORP.  
PA WPI; 1994-061479/08.  
XX DNA encoding cat zona pellucida FZP-3 - useful as antigen in  
PT contraceptive vaccine and for sterilisation.  
XX Example 1; Page 6; 19pp; Japanese.  
PS The feline zona pellucida protein can be used as an antigen in the  
XX preparation of contraceptive vaccines for cats. Primers 1-8 (see AAQ56042  
CC -Q56049) were used to amplify cDNA coding for the FZP-3 protein  
XX Sequence 21 BP; 3 A; 3 C; 2 G; 13 T; 0 U; 0 Other;  
SQ Query Match 0.4%; Score 12.4; DB 1; Length 21;  
Best Local Similarity 92.9%; Pred. No. 6e+03;  
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1979 AAAAAAAAAAAGT 1992  
Db 21 AAAAAAAAAAAGT 8

RESULT 5418  
AAQ70078/C  
ID AAQ70078 standard; DNA; 21 BP.  
XX  
AC AAQ70078;  
XX  
DT 15-MAR-1995 (first entry)  
XX  
DE CYP2(487-713) primer 6.  
XX  
KW Canine; dog; zona pellucida; ZP; CYP2; contraceptive; vaccine; antigen;  
ss.  
XX  
OS Synthetic.  
XX  
PN JP06189766-A.  
XX  
PD 12-JUL-1994.  
XX  
PF 25-DEC-1992; 92JP-00359265.  
XX  
PR 25-DEC-1992; 92JP-00359265.  
XX  
PA (TOFU ) TONEN CORP.  
XX  
DR WPI; 1994-259553/32.  
XX  
PT New DNA sequence encoding canine zona pellucida CYP2 - useful for the  
prodn. of a canine contraceptive vaccine antigen.  
XX  
PS Disclosure; Page 5; 10pp; Japanese.  
XX  
CC The CYP2 DNA (AAQ70072) was prepd. by the cloning of CYP2(75-520) -  
AAQ81700 using the primers given in AAQ70073-74, CYP2(1-65) - AAQ81804  
using the primers given in AAQ70082-83, CYP2(42-103) - AAQ81803 using the  
primers given in AAQ70079-81 and CYP2(487-713) - AAQ81957 using the  
primers given in AAQ70075-78  
XX  
SQ Sequence 21 BP; 3 A; 3 C; 2 G; 13 T; 0 U; 0 Other;

Query Match 0.4%; Score 12.4; DB 1; Length 21;  
Best Local Similarity 92.9%; Pred. No. 6e+03;  
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1979 AAAAAAAAAAAGT 1992  
Db 21 AAAAAAAAAAAGT 8

RESULT 5419  
AAT28050/C  
ID AAT28050 standard; DNA; 22 BP.  
XX  
AC AAT28050;  
XX  
DT 31-DEC-1996 (first entry)  
XX  
DE 3'-primer G for human fibroblasts.  
XX  
KW Polymerase chain reaction; PCR; primer; amplify; human; fibroblast; AIDS;  
KW enhanced differential display; EDD; mRNA preparation; senescent cell;  
KW quiescent cell; dividing cell; senescence-related gene; gene expression;  
KW non-senescent cell; age-related lipofuscin; retina; therapy; liver spot;  
KW donor tissue; senescent melanocyte; melanin; hypopigmentation; ss.  
XX  
OS Synthetic.  
XX

PN WO9613610-A2.  
XX  
PD 09-MAY-1996.  
XX  
PF 24-AUG-1995; 95WO-US011230.  
XX  
PR 31-OCT-1994; 94US-00332420.  
XX  
PA (GERO-) GERON CORP.  
XX  
PI Linskens MHK, Hirsch KS, Villeponteau B, Feng J, Funk W, West MD;  
XX  
DR WPI; 1996-251464/25.  
XX  
PT Identifying, isolating and regulating senescence-related genes - useful  
to ameliorate problems associated with accumulation of senescent cells,  
e.g. age-related lipofuscin accumulation in the retina and AIDS.  
XX  
PS Claim 6; Page 25; 135pp; English.  
XX  
CC AAT28044-T28075 represent primers for human fibroblasts in enhanced  
differential display (EDD), which is used in conjunction with the method  
of the invention. EDD is an mRNA preparation method. AAT28044-T28055  
represent T-rich 3'-primers, while AAT28056-T28075 are randomly selected  
5'-primers used in EDD of human fibroblasts. The 3'-primers used are  
complementary to the poly-A tail of the mRNA. In the method of the  
invention, mRNA is isolated from a senescent cell, and a young quiescent  
cell, and the mRNAs are amplified in separate reaction mixtures. The  
amplified sequences are then separated by size or charge, and the  
products are analysed to identify a gene from young quiescent cells and  
dividing cells, that is present at a different level from senescent  
cells. The method can be used for the rapid and efficient identification  
and isolation of senescence-related genes and gene products, and to  
detect and distinguish between senescent and non-senescent cells. It can  
also be used to destroy cells expressing senescence specific (or related)  
gene products, and to screen for compounds capable of altering gene  
expression in senescent cells. The method can also be used to ameliorate  
problems associated with the accumulation of senescent cells such as age-  
related lipofuscin accumulation in the retina, and in the treatment of  
AIDS. Also, the method can be used to distinguish young cells from  
senescent cells in donor tissue, which is useful in removing senescent  
melanocytes overexpressing melanin which cause hypopigmentation, or liver  
spots  
XX  
SQ Sequence 22 BP; 3 A; 3 C; 3 G; 13 T; 0 U; 0 Other;

Query Match 0.4%; Score 12.4; DB 1; Length 22;  
Best Local Similarity 92.9%; Pred. No. 6.1e+03;  
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2786 AAAAAAAAAAAAAA 2799  
Db 22 AAAAAAAAAAAAAA 9

RESULT 5420  
AAT28051/C  
ID AAT28051 standard; DNA; 22 BP.  
XX  
AC AAT28051;  
XX  
DT 31-DEC-1996 (first entry)  
XX  
DE 3'-primer H for human fibroblasts.  
XX  
KW Polymerase chain reaction; PCR; primer; amplify; human; fibroblast; AIDS;  
KW enhanced differential display; EDD; mRNA preparation; senescent cell;  
KW quiescent cell; dividing cell; senescence-related gene; gene expression;  
KW non-senescent cell; age-related lipofuscin; retina; therapy; liver spot;  
KW donor tissue; senescent melanocyte; melanin; hypopigmentation; ss.  
XX  
OS Synthetic.  
XX

PN WO9613610-A2.  
XX  
PD 09-MAY-1996.  
XX  
PF 24-AUG-1995; 95WO-US011230.  
XX  
PR 31-OCT-1994; 94US-00332420.  
XX  
PA (GERO-) GERON CORP.  
XX  
PI Linskens MHK, Hirsch KS, Villeponteau B, Feng J, Funk W, West MD;  
XX  
DR WPI; 1996-251464/25.  
XX  
PT Identifying, isolating and regulating senescence-related genes - useful  
PT to ameliorate problems associated with accumulation of senescent cells,  
PT e.g. age-related lipofuscin accumulation in the retina and AIDS.  
XX  
PS Claim 6; Page 25; 135pp; English.  
XX  
CC AAT28044-T28075 represent primers for human fibroblasts in enhanced  
CC differential display (EDD), which is used in conjunction with the method  
CC of the invention. EDD is an mRNA preparation method. AAT28044-T28055  
CC represent T-rich 3'-primers, while AAT28056-T28075 are randomly selected  
CC 5'-primers used in EDD of human fibroblasts. The 3'-primers used are  
CC complementary to the poly-A tail of the mRNA. In the method of the  
CC invention, mRNA is isolated from a senescent cell, and a young quiescent  
CC cell, and the mRNAs are amplified in separate reaction mixtures. The  
CC amplified sequences are then separated by size or charge, and the  
CC products are analysed to identify a gene from young quiescent cells and  
CC dividing cells, that is present at a different level from senescent  
CC cells. The method can be used for the rapid and efficient identification  
CC and isolation of senescence-related genes and gene products, and to  
CC detect and distinguish between senescent and non-senescent cells. It can  
CC also be used to destroy cells expressing senescence specific (or related)  
CC gene products, and to screen for compounds capable of altering gene  
CC expression in senescent cells. The method can also be used to ameliorate  
CC problems associated with the accumulation of senescent cells such as age-  
CC related lipofuscin accumulation in the retina, and in the treatment of  
CC AIDS. Also, the method can be used to distinguish young cells from  
CC senescent cells in donor tissue, which is useful in removing senescent  
CC melanocytes overexpressing melanin which cause hypopigmentation, or liver  
CC spots  
XX  
SQ Sequence 22 BP; 3 A; 4 C; 3 G; 12 T; 0 U; 0 Other;  
  
Query Match 0.4%; Score 12.4; DB 1; Length 22;  
Best Local Similarity 92.9%; Pred. No. 6.1e+03;  
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
  
QY 2785 GAAAAAAAAAAAAA 2798  
DB | ||||| |||||  
22 GTAAAAAAAAAAAAA 9  
  
RESULT 5421  
AAT58490/c  
ID AAT58490 standard; DNA; 22 BP.  
XX  
AC AAT58490;  
XX  
DT 24-MAR-1997 (first entry)  
XX  
DE First primer #7 for use in enhanced differential display method.  
XX  
KW Differential Display; Enhanced Differential Display; EDD; screening;  
KW gene expression; cell type; different; cell development; gene typing;  
KW identification; differentiation; aging; and disease; primer; PCR; ss.  
XX  
OS Synthetic.  
XX  
PN US5580726-A.  
XX

PD 03-DEC-1996.  
XX  
PF 29-APR-1994; 94US-00235180.  
XX  
PR 29-APR-1994; 94US-00235180.  
XX  
PA (GERO-) GERON CORP.  
XX  
PI Linskens MHK, Feng J, Villeponteau B, Funk W;  
XX  
DR WPI; 1997-033564/03.  
XX  
PT Detection of differentially expressed mRNA mols. - using two-step  
PT polymerase chain reaction amplification method.  
PS Claim 9; Col 15; 15pp; English.  
XX  
CC An improved method of Differential Display, named Enhanced Differential  
CC Display (EDD) has been designed as a technique for screening differences  
CC in gene expression between various cell types or between different stages  
CC of cell development. The technique is highly reproducible, leading to  
CC precise typing of the expressed genes in any given cell. EDD analysis  
CC permits the identification of novel genes involved in differentiation,  
CC aging and disease, and enables direct comparisons of different cell types  
CC and disease states. By using longer primers, and/or an alteration in the  
CC annealing temperatures, the number of false positives can be reduced.  
CC First, cDNA is prepared from total cellular RNA using 12 different 22-  
CC base oligonucleotides (AAT58484-95) that are targeted to the poly A tail  
CC of pol II mRNA transcripts. The last two bases of each primer varies so  
CC as to anchor the primer to the 3' end of different sets of mRNAs. A  
CC second set of 12 22-base oligo primers (AAT58472-83) is designed to  
CC randomly select a subset of cDNAs from each of the twelve 3' primers. PCR  
CC amplification of a subset of cDNAs is carried out in a two step process  
CC using particular 5' and 3' primers. The amplified gene products can then  
CC be directly sequenced or rapidly subcloned for DNA sequencing  
XX  
SQ Sequence 22 BP; 3 A; 3 C; 3 G; 13 T; 0 U; 0 Other;  
  
Query Match 0.4%; Score 12.4; DB 1; Length 22;  
Best Local Similarity 92.9%; Pred. No. 6.1e+03;  
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
  
QY 2786 AAAAAAAAAAAAAA 2799  
DB | ||||| |||||  
22 ATAAAAAAAAAAAAA 9  
  
RESULT 5422  
AAT58491/c  
ID AAT58491 standard; DNA; 22 BP.  
XX  
AC AAT58491;  
XX  
DT 24-MAR-1997 (first entry)  
XX  
DE First primer #8 for use in enhanced differential display method.  
XX  
KW Differential Display; Enhanced Differential Display; EDD; screening;  
KW gene expression; cell type; different; cell development; gene typing;  
KW identification; differentiation; aging; and disease; primer; PCR; ss.  
XX  
OS Synthetic.  
XX  
PN US5580726-A.  
XX  
PD 03-DEC-1996.  
XX  
PF 29-APR-1994; 94US-00235180.  
XX  
PR 29-APR-1994; 94US-00235180.  
XX  
PA (GERO-) GERON CORP.  
XX



PI Linskens MHK, Feng J, Villeponteau B, Funk W;  
XX  
DR WPI; 1997-033564/03.

PT Detection of differentially expressed mRNA mols. - using two-step  
PT polymerase chain reaction amplification method.

PS Claim 9; Col 15; 15pp; English.

An improved method of Differential Display, named Enhanced Differential Display (EDD) has been designed as a technique for screening differences in gene expression between various cell types or between different stages of cell development. The technique is highly reproducible, leading to precise typing of the expressed genes in any given cell. EDD analysis permits the identification of novel genes involved in differentiation, aging and disease, and enables direct comparisons of different cell types and disease states. By using longer primers, and/or an alteration in the annealing temperatures, the number of false positives can be reduced. First, cDNA is prepared from total cellular RNA using 12 different 22-base oligonucleotides (AAT58484-95) that are targeted to the poly A tail of pol II mRNA transcripts. The last two bases of each primer varies so as to anchor the primer to the 3' end of different sets of mRNAs. A second set of 12 22-base oligo primers (AAT58472-83) is designed to randomly select a subset of cDNAs from each of the twelve 3' primers. PCR amplification of a subset of cDNAs is carried out in a two step process using particular 5' and 3' primers. The amplified gene products can then be directly sequenced or rapidly subcloned for DNA sequencing.

SQ Sequence 22 BP; 3 A; 4 C; 3 G; 12 T; 0 U; 0 Other;

Query Match 0.4%; Score 12.4; DB 1; Length 22;  
Best Local Similarity 92.9%; Pred. No. 6.1e+03;  
Matches 13; Conservative 0; Mismatches 1; Indels

QY 2785 GAAAAAAAAAAAAA 2798  
D**b** 22 GTAAAAAAAAAAAAA 9

RESULT 5423  
AAZ47348/C  
ID AAZ47348 standard; DNA: 22 BP.

XX Sd XX

Example 2; Page 35; 78pp; English.

Sequences AAZ47342-247353 are oligo(dT12N2) primers used in the differential display analysis of the *Aspergillus oryzae* strains HC4.01 and 27. The strains were analysed to find the genetic basis for phenotypic differences in the strains which are used in a method for producing a polypeptide in an enhanced amount. The method involves cultivating a mutant of a parent filamentous fungal cell in suitable nutrient medium. The mutant cell contains the nucleotide sequence encoding the polypeptide to be synthesised and one or more second nucleotide sequences encoding a DDC polypeptide (see AAZ47338-247339). The mutant cell produces more of the polypeptide than the parent cell and the polypeptide can be recovered from the nutrient medium of the mutant cell. The method can be used for the production of polypeptides such as hormones, receptors, antibodies, reporters or enzymes, e.g. an aminopeptidase, amylase, carboxypeptidase, carboxypeptidase, catalase, cellulase, chitinase, cutinase, cyclodextrin glycosyltransferase, deoxyribonuclease, esterase, alpha-galactosidase, beta-galactosidase, glucoamylase, alpha-glucosidase, beta-glucosidase, invertase, lactase, lipase, mannosidase, mutanase, oxidase, pectinolytic enzyme, peroxidase, phytase, polyphenoloxidase, proteolytic enzyme, ribonuclease, transglutaminase or xylanase

Sequence 22 BP: 3 A: 3 C: 3 G: 13 T: 0 U: 0 Other: 0

Query Match 0.4%; Score 12.4; DB 1; Length 22;  
Best Local Similarity 92.9%; Pred. No. 6.1e+03;  
Matches 13; Conservative 0; Mismatches 1; Indels

QY 2786 AAAAAAAAAAAAAA 2799  
| | | | | | | | | |  
Db 22 ATAAAAAAAAAAAAA 9

RESULT 5424  
AAZ47349/C  
ID AAZ47349 standard: DNA: 22 BP

CC and 27. The strains were analysed to find the genetic basis for phenotype  
CC differences in the strains which are used in a method for producing a  
CC polypeptide in an enhanced amount. The method involves cultivating a  
CC mutant of a parent filamentous fungal cell in suitable nutrient medium.  
CC The mutant cell contains the nucleotide sequence encoding the polypeptide  
CC to be synthesised and one or more second nucleotide sequences encoding a  
CC DDC polypeptide (see AAZ47338-Z47339). The mutant cell produces more of  
CC the polypeptide than the parent cell and the polypeptide can be recovered  
CC from the nutrient medium of the mutant cell. The method can be used for  
CC the production of polypeptides such as hormones, receptors, antibodies,  
CC reporters or enzymes, e.g. an aminopeptidase, amylase, carbohydriase,  
CC carboxypeptidase, catalase, cellulase, chitinase, cutinase, cyclodextrin  
CC glycosyltransferase, deoxyribonuclease, esterase, alpha-galactosidase,  
CC beta-galactosidase, glucoamylase, alpha-glucosidase, beta-glucosidase,  
CC invertase, laccase, lipase, mannosidase, mutanase, oxidase, pectinolytic  
CC enzyme, peroxidase, phytase, polyphenoloxidase, proteolytic enzyme,  
CC ribonuclease, transglutaminase or xylanase  
XX  
SQ Sequence 22 BP; 3 A; 4 C; 3 G; 12 T; 0 U; 0 Other;

Query Match 0.4%; Score 12.4; DB 1; Length 22;  
Best Local Similarity 92.9%; Pred. No. 6.1e+03;  
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2785 GAAAAAATAAAAAA 2798  
| | | | | | | | | |  
Db 22 GTAAAAAATAAAAAA 9

RESULT 5425  
AAH22191/c  
ID AAH22191 standard; DNA; 22 BP.  
XX  
AC AAH22191;  
XX  
DT 20-AUG-2001 (first entry)  
XX  
DE Human hepatocyte auxin related 3'-(T-rich) primer G.  
XX  
KW Human; hepatocyte; auxin; liver; hepatitis; chronic hepatitis;  
KW liver fibrosis; cirrhosis; liver damage; primer; ss.  
XX  
OS Homo sapiens.  
XX  
PN CN1280985-A.  
XX  
PD 24-JAN-2001.  
XX  
PF 20-JUL-1999; 99CN-00110801.  
XX  
PR 20-JUL-1999; 99CN-00110801.  
XX  
PA (HOSP-) HOSPITAL NO 458 CHINESE PLA.  
XX  
PI Kong X, Yi X, Zeng P;  
XX  
DR WPI; 2001-291394/31.  
XX  
PT Novel recombinant human hepatocyte auxin, its preparation and clinical  
PT application.  
XX  
PS Example 1; Page 2 (disclosure); 13pp; Chinese.  
XX  
CC The present invention describes a differential indication PCR (polymerase  
CC chain reaction) technique which is used to obtain a new complete gene  
CC able to promote the repair of damaged liver cells and with substance  
CC total length of 0.7 kb by screening the cDNA library of human foetal  
CC liver. The induction expression of engineering bacteria, the separation  
CC and cracking of inclusion body and the process for restoring and  
CC decontaminating proteins are built up to obtain high purity recombinant  
CC human hepatocyte auxin. It can externally promote the reproduction of  
CC primary culture liver cells and liver cancer cells BEL-7402 and  
CC internally promote the synthesis of mouse liver cell DNA after CCL4 is

CC damaged and the repair of liver cells. The method may be used to treat  
CC serious hepatitis, chronic hepatitis, liver fibrosis and cirrhosis. The  
CC present sequence represents a primer which is used in the exemplification  
CC of the present invention  
XX  
SQ Sequence 22 BP; 3 A; 3 C; 3 G; 13 T; 0 U; 0 Other;  
  
Query Match 0.4%; Score 12.4; DB 1; Length 22;  
Best Local Similarity 92.9%; Pred. No. 6.1e+03;  
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
  
QY 2786 AAAAAAATAAAAAA 2799  
| | | | | | | | | |  
Db 22 ATAAAAAATAAAAAA 9  
  
RESULT 5426  
AAH22192/c  
ID AAH22192 standard; DNA; 22 BP.  
XX  
AC AAH22192;  
XX  
DT 20-AUG-2001 (first entry)  
XX  
DE Human hepatocyte auxin related 3'-(T-rich) primer H.  
XX  
KW Human; hepatocyte; auxin; liver; hepatitis; chronic hepatitis;  
KW liver fibrosis; cirrhosis; liver damage; primer; ss.  
XX  
OS Homo sapiens.  
XX  
PN CN1280985-A.  
XX  
PD 24-JAN-2001.  
XX  
PF 20-JUL-1999; 99CN-00110801.  
XX  
PR 20-JUL-1999; 99CN-00110801.  
XX  
PA (HOSP-) HOSPITAL NO 458 CHINESE PLA.  
XX  
PI Kong X, Yi X, Zeng P;  
XX  
DR WPI; 2001-291394/31.  
XX  
PT Novel recombinant human hepatocyte auxin, its preparation and clinical  
PT application.  
XX  
PS Example 1; Page 2 (disclosure); 13pp; Chinese.  
XX  
CC The present invention describes a differential indication PCR (polymerase  
CC chain reaction) technique which is used to obtain a new complete gene  
CC able to promote the repair of damaged liver cells and with substance  
CC total length of 0.7 kb by screening the cDNA library of human foetal  
CC liver. The induction expression of engineering bacteria, the separation  
CC and cracking of inclusion body and the process for restoring and  
CC decontaminating proteins are built up to obtain high purity recombinant  
CC human hepatocyte auxin. It can externally promote the reproduction of  
CC primary culture liver cells and liver cancer cells BEL-7402 and  
CC internally promote the synthesis of mouse liver cell DNA after CCL4 is  
CC damaged and the repair of liver cells. The method may be used to treat  
CC serious hepatitis, chronic hepatitis, liver fibrosis and cirrhosis. The  
CC present sequence represents a primer which is used in the exemplification  
CC of the present invention  
XX  
SQ Sequence 22 BP; 3 A; 4 C; 3 G; 12 T; 0 U; 0 Other;

Query Match 0.4%; Score 12.4; DB 1; Length 22;  
Best Local Similarity 92.9%; Pred. No. 6.1e+03;  
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2785 GAAAAAATAAAAAA 2798  
| | | | | | | | | |

Db 22 GTAAAAAAAAAAAA 9

RESULT 5427  
AAT28055/c  
ID AAT28055 standard; DNA; 22 BP.

XX AC AAT28055;  
XX DT 31-DEC-1996 (first entry)  
XX DE 3'-primer M for human fibroblasts.

XX KW Polymerase chain reaction; PCR; primer; amplify; human; fibroblast; AIDS;  
XX KW enhanced differential display; EDD; mRNA preparation; senescent cell;  
XX KW quiescent cell; dividing cell; senescence-related gene; gene expression;  
XX KW non-senescent cell; age-related lipofuscin; retina; therapy; liver spot;  
XX KW donor tissue; senescent melanocyte; melanin; hypopigmentation; ss.

XX OS Synthetic.

XX PN WO9613610-A2.

XX PD 09-MAY-1996.

XX PF 24-AUG-1995; 95WO-US011230.

XX PR 31-OCT-1994; 94US-00332420.

XX PA (GERO-) GERON CORP.

XX PI Linskens MHK, Hirsch KS, Villeponteau B, Feng J, Funk W, West MD;

XX DR WPI; 1996-251464/25.

XX PT Identifying, isolating and regulating senescence-related genes - useful  
XX PT to ameliorate problems associated with accumulation of senescent cells,  
XX PT e.g. age-related lipofuscin accumulation in the retina and AIDS.

XX PS Claim 6; Page 25; 135pp; English.

XX CC AAT28044-T28075 represent primers for human fibroblasts in enhanced  
XX CC differential display (EDD), which is used in conjunction with the method  
XX CC of the invention. EDD is an mRNA preparation method. AAT28044-T28055  
XX CC represent T-rich 3'-primers, while AAT28056-T28075 are randomly selected  
XX CC 5'-primers used in EDD of human fibroblasts. The 3'-primers used are  
XX CC complementary to the poly-A tail of the mRNA. In the method of the  
XX CC invention, mRNA is isolated from a senescent cell, and a young quiescent  
XX CC cell, and the mRNAs are amplified in separate reaction mixtures. The  
XX CC amplified sequences are then separated by size or charge, and the  
XX CC products are analysed to identify a gene from young quiescent cells and  
XX CC dividing cells, that is present at a different level from senescent  
XX CC cells. The method can be used for the rapid and efficient identification  
XX CC and isolation of senescence-related genes and gene products, and to  
XX CC detect and distinguish between senescent and non-senescent cells. It can  
XX CC also be used to destroy cells expressing senescence specific (or related)  
XX CC gene products, and to screen for compounds capable of altering gene  
XX CC expression in senescent cells. The method can also be used to ameliorate  
XX CC problems associated with the accumulation of senescent cells such as age-  
XX CC related lipofuscin accumulation in the retina, and in the treatment of  
XX CC AIDS. Also, the method can be used to distinguish young cells from  
XX CC senescent cells in donor tissue, which is useful in removing senescent  
XX CC melanocytes overexpressing melanin which cause hypopigmentation, or liver  
XX CC spots

XX SQ Sequence 22 BP; 2 A; 4 C; 4 G; 12 T; 0 U; 0 Other;

Query Match 0.4%; Score 12.4; DB 1; Length 22;  
Best Local Similarity 92.9%; Pred. No. 6.1e+03;  
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2785 GAAAAAAAAAAAAA 2798  
| | | | | | | | | |

Db 22 GCAAAAAAAAAAAAA 9

RESULT 5428  
AAT28047/c  
ID AAT28047 standard; DNA; 22 BP.

XX AC AAT28047;

XX DT 31-DEC-1996 (first entry)

XX DE 3'-primer D for human fibroblasts.

XX KW Polymerase chain reaction; PCR; primer; amplify; human; fibroblast; AIDS;  
XX KW enhanced differential display; EDD; mRNA preparation; senescent cell;  
XX KW quiescent cell; dividing cell; senescence-related gene; gene expression;  
XX KW non-senescent cell; age-related lipofuscin; retina; therapy; liver spot;  
XX KW donor tissue; senescent melanocyte; melanin; hypopigmentation; ss.

XX OS Synthetic.

XX PN WO9613610-A2.

XX PD 09-MAY-1996.

XX PF 24-AUG-1995; 95WO-US011230.

XX PR 31-OCT-1994; 94US-00332420.

XX PA (GERO-) GERON CORP.

XX PI Linskens MHK, Hirsch KS, Villeponteau B, Feng J, Funk W, West MD;

XX DR WPI; 1996-251464/25.

XX PT Identifying, isolating and regulating senescence-related genes - useful  
XX PT to ameliorate problems associated with accumulation of senescent cells,  
XX PT e.g. age-related lipofuscin accumulation in the retina and AIDS.

XX PS Claim 6; Page 25; 135pp; English.

XX CC AAT28044-T28075 represent primers for human fibroblasts in enhanced  
XX CC differential display (EDD), which is used in conjunction with the method  
XX CC of the invention. EDD is an mRNA preparation method. AAT28044-T28055  
XX CC represent T-rich 3'-primers, while AAT28056-T28075 are randomly selected  
XX CC 5'-primers used in EDD of human fibroblasts. The 3'-primers used are  
XX CC complementary to the poly-A tail of the mRNA. In the method of the  
XX CC invention, mRNA is isolated from a senescent cell, and a young quiescent  
XX CC cell, and the mRNAs are amplified in separate reaction mixtures. The  
XX CC amplified sequences are then separated by size or charge, and the  
XX CC products are analysed to identify a gene from young quiescent cells and  
XX CC dividing cells, that is present at a different level from senescent  
XX CC cells. The method can be used for the rapid and efficient identification  
XX CC and isolation of senescence-related genes and gene products, and to  
XX CC detect and distinguish between senescent and non-senescent cells. It can  
XX CC also be used to destroy cells expressing senescence specific (or related)  
XX CC gene products, and to screen for compounds capable of altering gene  
XX CC expression in senescent cells. The method can also be used to ameliorate  
XX CC problems associated with the accumulation of senescent cells such as age-  
XX CC related lipofuscin accumulation in the retina, and in the treatment of  
XX CC AIDS. Also, the method can be used to distinguish young cells from  
XX CC senescent cells in donor tissue, which is useful in removing senescent  
XX CC melanocytes overexpressing melanin which cause hypopigmentation, or liver  
XX CC spots

XX SQ Sequence 22 BP; 2 A; 3 C; 4 G; 13 T; 0 U; 0 Other;

Query Match 0.4%; Score 12.4; DB 1; Length 22;  
Best Local Similarity 92.9%; Pred. No. 6.1e+03;  
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2786 AAAAAAAAAAAAAA 2799  
| | | | | | | | | |



Db 22 ACAAAAAAAAAA 9

RESULT 5429  
AAT58487/C

ID AAT58487 standard; DNA; 22 BP.

XX AC AAT58487;

XX DT 21-MAR-1997 (first entry)

XX DE First primer #4 for use in enhanced differential display method.

XX KW Differential Display; Enhanced Differential Display; EDD; screening;

XX KW gene expression; cell type; different; cell development; gene typing;

XX KW identification; differentiation; aging; and disease; primer; PCR; ss.

XX OS Synthetic.

XX PN US5580726-A.

XX PD 03-DEC-1996.

XX PF 29-APR-1994; 94US-00235180.

XX PR 29-APR-1994; 94US-00235180.

XX PA (GERO-) GERON CORP.

XX PI Linskens MHK, Feng J, Villeponteau B, Funk W;

XX WPI; 1997-033564/03.

XX PT Detection of differentially expressed mRNA mols. - using two-step

XX PT polymerase chain reaction amplification method.

XX PS Claim 9; Col 15; 15pp; English.

XX CC An improved method of Differential Display, named Enhanced Differential

CC Display (EDD) has been designed as a technique for screening differences

CC in gene expression between various cell types or between different stages

CC of cell development. The technique is highly reproducible, leading to

CC precise typing of the expressed genes in any given cell. EDD analysis

CC permits the identification of novel genes involved in differentiation,

CC aging and disease, and enables direct comparisons of different cell types

CC and disease states. By using longer primers, and/or an alteration in the

CC annealing temperatures, the number of false positives can be reduced.

CC First, cDNA is prepared from total cellular RNA using 12 different 22-

CC base oligonucleotides (AAT58484-95) that are targeted to the poly A tail

CC of pol II mRNA transcripts. The last two bases of each primer varies so

CC as to anchor the primer to the 3' end of different sets of mRNAs. A

CC second set of 12 22-base oligo primers (AAT58472-83) is designed to

CC randomly select a subset of cDNAs from each of the twelve 3' primers. PCR

CC amplification of a subset of cDNAs is carried out in a two step process

CC using particular 5' and 3' primers. The amplified gene products can then

CC be directly sequenced or rapidly subcloned for DNA sequencing

XX SQ Sequence 22 BP; 2 A; 3 C; 4 G; 13 T; 0 U; 0 Other;

Query Match 0.4%; Score 12.4; DB 1; Length 22;

Best Local Similarity 92.9%; Pred. No. 6.1e+03;

Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2786 AAAAAAAAAAAAAA 2799

Db 22 ACAAAAAAAAAA 9

RESULT 5430  
AAT58495/C

ID AAT58495 standard; DNA; 22 BP.

XX AC AAT58495;

XX 24-MAR-1997 (first entry)

XX DT First primer #12 for use in enhanced differential display method.

XX DE Differential Display; Enhanced Differential Display; EDD; screening;

XX KW gene expression; cell type; different; cell development; gene typing;

XX KW identification; differentiation; aging; and disease; primer; PCR; ss.

XX OS Synthetic.

XX PN US5580726-A.

XX PD 03-DEC-1996.

XX PF 29-APR-1994; 94US-00235180.

XX PR 29-APR-1994; 94US-00235180.

XX PA (GERO-) GERON CORP.

XX PI Linskens MHK, Feng J, Villeponteau B, Funk W;

XX WPI; 1997-033564/03.

XX PT Detection of differentially expressed mRNA mols. - using two-step

XX PT polymerase chain reaction amplification method.

XX PS Claim 9; Col 17; 15pp; English.

XX CC An improved method of Differential Display, named Enhanced Differential

CC Display (EDD) has been designed as a technique for screening differences

CC in gene expression between various cell types or between different stages

CC of cell development. The technique is highly reproducible, leading to

CC precise typing of the expressed genes in any given cell. EDD analysis

CC permits the identification of novel genes involved in differentiation,

CC aging and disease, and enables direct comparisons of different cell types

CC and disease states. By using longer primers, and/or an alteration in the

CC annealing temperatures, the number of false positives can be reduced.

CC First, cDNA is prepared from total cellular RNA using 12 different 22-

CC base oligonucleotides (AAT58484-95) that are targeted to the poly A tail

CC of pol II mRNA transcripts. The last two bases of each primer varies so

CC as to anchor the primer to the 3' end of different sets of mRNAs. A

CC second set of 12 22-base oligo primers (AAT58472-83) is designed to

CC randomly select a subset of cDNAs from each of the twelve 3' primers. PCR

CC amplification of a subset of cDNAs is carried out in a two step process

CC using particular 5' and 3' primers. The amplified gene products can then

CC be directly sequenced or rapidly subcloned for DNA sequencing

XX SQ Sequence 22 BP; 2 A; 4 C; 4 G; 12 T; 0 U; 0 Other;

Query Match 0.4%; Score 12.4; DB 1; Length 22;

Best Local Similarity 92.9%; Pred. No. 6.1e+03;

Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2785 GAAAAAAAAAAAAA 2798

Db 22 GCAAAAAAAAAA 9

RESULT 5431  
AAX55049/C

ID AAX55049 standard; DNA; 22 BP.

XX AC AAX55049;

XX DT 05-JUL-1999 (first entry)

XX DE C/EBP-beta antisense oligonucleotide fragment.

XX KW Antisense oligonucleotide; multiple target; antisense treatment;

XX KW impaired respiration; inflammation; lung disease;

XX KW pulmonary vasoconstriction; inflammation; allergic rhinitis;



KW acute asthma; allergy; asthma; impeded respiration;  
KW respiratory distress syndrome; pain; cystic fibrosis;  
KW pulmonary hypertension; pulmonary vasoconstriction; emphysema;  
KW chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma;  
KW colon cancer; breast cancer; lung cancer; pancreatic cancer;  
KW hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;  
KW prostate cancer; ss.  
XX  
OS Synthetic.  
XX  
PN WO9913886-A1.  
XX  
PD 25-MAR-1999.  
XX  
PF 17-SEP-1998; 98WO-US019419.  
XX  
PR 17-SEP-1997; 97US-0059160P.  
PR 09-JUN-1998; 98US-00093972.  
XX  
PA (UYEC-) UNIV EAST CAROLINA.  
XX  
PI Nyce JW;  
XX  
DR WPI; 1999-229400/19.  
XX  
PT New antisense oligonucleotides used in treatment of, e.g. pulmonary  
PT vasoconstriction.  
XX  
PS Disclosure; Page 70; 120pp; English.  
XX  
CC The specification describes antisense oligonucleotides (AAX52869-X55271)  
CC directed against at least 2 mRNAs selected from target genes, coding and  
CC non-coding regions of RNAs corresponding to target genes, gene initiation  
CC codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'-  
CC -end and the juxta-section between coding and non-coding regions and all  
CC segments of RNAs encoding proteins associated with one or more diseases,  
CC conditions or mixtures. The antisense oligonucleotides may be derived  
CC from sequences AAX55272-74. These multiple target oligonucleotides  
CC (specifically AAX55180-271) can be used for the antisense treatment of  
CC diseases and conditions. Typical diseases and conditions are those  
CC associated with impaired respiration and inflammation, including lung  
CC diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis,  
CC acute asthma, allergies, asthma, impeded respiration, respiratory  
CC distress syndrome, pain, cystic fibrosis, pulmonary hypertension,  
CC pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary  
CC disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g.  
CC colon cancer, breast cancer, lung cancer, pancreatic cancer,  
CC hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, as  
CC well as all types of cancers which may metastasize or have metastasized  
CC to the lungs, including breast and prostate cancer  
XX  
SQ Sequence 22 BP; 0 A; 7 C; 14 G; 1 T; 0 U; 0 Other;  
Query Match 0.4%; Score 12.4; DB 1; Length 22;  
Best Local Similarity 72.7%; Pred. No. 6.1e+03;  
Matches 16; Conservative 0; Mismatches 6; Indels 0; Gaps 0;  
QY 470 GCCTGGCCCGCCGCCAGAGCC 491  
Db 22 GCCAGGCGCGCCGCCCGCCGCC 1  
RESULT 5432  
AAA34496/C  
ID AAA34496 standard; DNA; 22 BP.  
XX  
AC AAA34496;  
XX  
DT 28-JUL-2000 (first entry)  
XX  
DE Human adenosine receptor related polynucleotide SEQ ID NO:2185.  
XX  
XX Human; adenosine receptor; low adenosine antisense oligonucleotide;

KW phosphorothioate; impaired respiration; inflammation; allergy;  
KW allergic disease; bronchoconstriction; inhibitor; antiinflammatory;  
KW antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway;  
KW lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;  
KW respiratory distress syndrome; pain; cystic fibrosis; emphysema;  
KW pulmonary hypertension; chronic obstructive pulmonary disease; COPD;  
KW cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO200009525-A2.  
XX  
PD 24-FEB-2000.  
XX  
PF 03-AUG-1999; 99WO-US017712.  
XX  
PR 03-AUG-1998; 98US-0095212P.  
XX  
PA (UYEC-) UNIV EAST CAROLINA.  
XX  
PI Nyce JW;  
XX  
DR WPI; 2000-205971/18.  
XX  
PT New antisense oligonucleotides useful for treating e.g. pulmonary  
PT vasoconstriction, inflammation, allergies, asthma, hypertension,  
PT bronchitis, emphysema, respiratory distress syndrome, ischemia or  
PT cancers.  
XX  
PS Disclosure; Page 539; 1343pp; English.  
XX  
CC The present invention describes a new composition comprising an antisense  
CC oligonucleotide (ON) with low adenosine (up to 15%), which targets  
CC nucleic acids involved in bronchoconstriction, allergies, and/or  
CC inflammation. The ON can have antiinflammatory, antiallergic,  
CC antiasthmatic, cytostatic and analgesic activities. The compositions are  
CC useful for the treatment of diseases associated with inflammation,  
CC impaired airways, including lung disease and diseases whose secondary  
CC effects afflict the lungs of a subject. They can be used for treating  
CC e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma,  
CC impeded respiration, respiratory distress syndrome, pain, cystic  
CC fibrosis, pulmonary hypertension, emphysema, chronic obstructive  
CC pulmonary disease (COPD), and cancers such as leukemias, lymphomas,  
CC carcinomas, and cancers which may metastasize to the lungs, including  
CC breast and prostate cancer. The reduction of the adenosine content of the  
CC ONs reduces side effects. The A-containing ONs break down with the  
CC release of deoxyadenosine which activates adenosine receptors causing the  
CC bronchoconstriction and inflammation. AAA32313 to AAA35312 represent the  
CC nucleotide sequences given in the sequence listing from the present  
CC invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185  
CC sequences are also called SEQ ID NO:1 to 185, but the sequences differ  
CC from the previously named sequences. SEQ ID NO:11 to 1680 (AAA32323 to  
CC AAA33992) are specifically claimed ONs from the present invention. N.B.  
CC Sequences given in the disclosure of the present invention do not match  
CC up with their corresponding SEQ ID NO: sequences given in the sequence  
CC listing  
XX  
SQ Sequence 22 BP; 0 A; 7 C; 14 G; 1 T; 0 U; 0 Other;  
Query Match 0.4%; Score 12.4; DB 1; Length 22;  
Best Local Similarity 72.7%; Pred. No. 6.1e+03;  
Matches 16; Conservative 0; Mismatches 6; Indels 0; Gaps 0;  
QY 470 GCCTGGCCCGCCGCCAGAGCC 491  
Db 22 GCCAGGCGCGCCGCCCGCCGCC 1  
RESULT 5433  
AAZ47353/C  
ID AAZ47353 standard; DNA; 22 BP.  
XX  
AC AAZ47353;

XX 06-MAR-2000 (first entry)  
DT  
XX  
DE PCR primer M used in differential display analysis of Aspergillus oryzae.  
XX  
KW Dopa decarboxylase; DDC2; DDC3; increased yield; hormone; receptor;  
KW antibody; reporter; enzyme; polypeptide production; primer; ss.  
XX  
OS Synthetic.  
OS Aspergillus oryzae.  
XX  
PN WO9960136-A1.  
XX  
PD 25-NOV-1999.  
XX  
PF 14-MAY-1999; 99WO-US010689.  
XX  
PR 15-MAY-1998; 98US-00079344.  
PR 15-MAY-1998; 98US-00079601.  
XX  
PA (NOVO ) NOVO NORDISK BIOTECH INC.  
PA (NOVO ) NOVO-NORDISK AS.  
XX  
PI Wahleithner J, Christensen T;  
XX  
DR WPI; 2000-062459/05.  
XX  
PT New isolated Aspergillus oryzae signaling sequences, used to increase the  
PT production of polypeptides by recombinant host filamentous fungal cells.  
XX  
PS Example 2; Page 35; 78pp; English.  
XX  
CC Sequences AAZ47342-Z47353 are oligo(dT12N2) primers used in the  
CC differential display analysis of the Aspergillus oryzae strains HC4.01  
CC and 27. The strains were analysed to find the genetic basis for phenotype  
CC differences in the strains which are used in a method for producing a  
CC polypeptide in an enhanced amount. The method involves cultivating a  
CC mutant of a parent filamentous fungal cell in suitable nutrient medium.  
CC The mutant cell contains the nucleotide sequence encoding the polypeptide  
CC to be synthesised and one or more second nucleotide sequences encoding a  
CC DDC polypeptide (see AAZ47338-Z47339). The mutant cell produces more of  
CC the polypeptide than the parent cell and the polypeptide can be recovered  
CC from the nutrient medium of the mutant cell. The method can be used for  
CC the production of polypeptides such as hormones, receptors, antibodies,  
CC reporters or enzymes, e.g. an aminopeptidase, amylase, carbohydrazin  
CC carboxyltransferase, deoxyribonuclease, esterase, alpha-galactosidase,  
CC beta-galactosidase, glucoamylase, alpha-glucosidase, beta-glucosidase,  
CC invertase, laccase, lipase, mannosidase, mutanase, oxidase, pectinolytic  
CC enzyme, peroxidase, phytase, polyphenoloxidase, proteolytic enzyme,  
CC ribonuclease, transglutaminase or xylanase  
XX  
SQ Sequence 22 BP; 2 A; 4 C; 4 G; 12 T; 0 U; 0 Other;  
  
Query Match 0.4%; Score 12.4; DB 1; Length 22;  
Best Local Similarity 92.9%; Pred. No. 6.1e+03;  
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
  
QY 2785 GAAAAA AAAAAAAAAA 2798  
Db 22 GCAAAAAAAAAA 9  
  
RESULT 5434  
AAZ47345/c  
ID AAZ47345 standard; DNA; 22 BP.  
XX  
AC AAZ47345;  
XX  
DT 06-MAR-2000 (first entry)  
XX  
DE PCR primer D used in differential display analysis of Aspergillus oryzae.  
XX

KW Dopa decarboxylase; DDC2; DDC3; increased yield; hormone; receptor;  
KW antibody; reporter; enzyme; polypeptide production; primer; ss.  
XX  
OS Synthetic.  
OS Aspergillus oryzae.  
XX  
PN WO9960136-A1.  
XX  
PD 25-NOV-1999.  
XX  
PF 14-MAY-1999; 99WO-US010689.  
XX  
PR 15-MAY-1998; 98US-00079344.  
PR 15-MAY-1998; 98US-00079601.  
XX  
PA (NOVO ) NOVO NORDISK BIOTECH INC.  
PA (NOVO ) NOVO-NORDISK AS.  
XX  
PI Wahleithner J, Christensen T;  
XX  
DR WPI; 2000-062459/05.  
XX  
PT New isolated Aspergillus oryzae signaling sequences, used to increase the  
PT production of polypeptides by recombinant host filamentous fungal cells.  
XX  
PS Example 2; Page 35; 78pp; English.  
XX  
CC Sequences AAZ47342-Z47353 are oligo(dT12N2) primers used in the  
CC differential display analysis of the Aspergillus oryzae strains HC4.01  
CC and 27. The strains were analysed to find the genetic basis for phenotype  
CC differences in the strains which are used in a method for producing a  
CC polypeptide in an enhanced amount. The method involves cultivating a  
CC mutant of a parent filamentous fungal cell in suitable nutrient medium.  
CC The mutant cell contains the nucleotide sequence encoding the polypeptide  
CC to be synthesised and one or more second nucleotide sequences encoding a  
CC DDC polypeptide (see AAZ47338-Z47339). The mutant cell produces more of  
CC the polypeptide than the parent cell and the polypeptide can be recovered  
CC from the nutrient medium of the mutant cell. The method can be used for  
CC the production of polypeptides such as hormones, receptors, antibodies,  
CC reporters or enzymes, e.g. an aminopeptidase, amylase, carbohydrazin  
CC carboxyltransferase, deoxyribonuclease, esterase, alpha-galactosidase,  
CC beta-galactosidase, glucoamylase, alpha-glucosidase, beta-glucosidase,  
CC invertase, laccase, lipase, mannosidase, mutanase, oxidase, pectinolytic  
CC enzyme, peroxidase, phytase, polyphenoloxidase, proteolytic enzyme,  
CC ribonuclease, transglutaminase or xylanase  
XX  
SQ Sequence 22 BP; 2 A; 3 C; 4 G; 13 T; 0 U; 0 Other;  
  
Query Match 0.4%; Score 12.4; DB 1; Length 22;  
Best Local Similarity 92.9%; Pred. No. 6.1e+03;  
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
  
QY 2786 AAAAAA AAAAAAAAAA 2799  
Db 22 ACAAAAAA AAAAAAAAAA 9  
  
RESULT 5435  
AAF20618/c  
ID AAF20618 standard; DNA; 22 BP.  
XX  
AC AAF20618;  
XX  
DT 14-MAR-2001 (first entry)  
XX  
DE Human C/EBP polynucleotide fragment #2185.  
XX  
KW Low adenosine antisense oligonucleotide; phosphorothioate; allergy;  
KW human; airway disorder; bronchoconstriction; lung inflammation;  
KW surfactant depletion; respiratory; bronchodilator; antiinflammatory;  
KW immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic;  
KW respiratory obstruction; pulmonary obstruction; impeded respiration;

KW surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;  
KW respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;  
KW pulmonary hypertension; emphysema; pulmonary transplantation rejection;  
KW chronic obstructive pulmonary disease; pulmonary infection; bronchitis;  
KW cancer; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO200062736-A2.  
XX  
PD 26-OCT-2000.  
XX  
PF 24-MAR-2000; 2000WO-US008020.  
XX  
PR 06-APR-1999; 99US-0127958P.  
XX  
PA (UYEC-) UNIV EAST CAROLINA.  
PA (NYCE/) NYCE J W.  
XX  
PI Nyce JW;  
XX  
DR WPI; 2000-679539/66.  
XX  
XX Low adenosine (A) content antisense oligonucleotides which do not trigger  
PT adenosine receptors during metabolism, useful e.g. for treating cancers  
PT and respiratory obstructions.  
XX  
PS Claim 14; Page 264; 1592pp; English.  
XX  
CC The present invention describes low adenosine (A) content antisense  
CC oligonucleotides and compositions (I) comprising them. In the antisense  
CC oligonucleotides the A is replaced by a 'Universal' or alternative base.  
CC (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,  
CC immunosuppressive, antiasthmatic, hypotensive and cytostatic activities.  
CC The antisense oligonucleotides and (I) can be used to down-regulate the  
CC expression and or activity of target polypeptides associated with  
CC lung/respiratory disorders and malignancies, such as stimulating and  
CC activating peptide factors and transmitters, transcription factors,  
CC immunoglobulins and antibodies, antibody receptors, cytokines and  
CC chemokines, endogenously produced specific and non-specific enzymes,  
CC binding proteins, adhesion molecules and their receptors, cytokine and  
CC chemokine receptors, adenosine receptors, bradykinin receptors, central  
CC nervous system (CNS) and peripheral nervous and non-nervous system  
CC receptors, CNS and peripheral nervous and non-nervous system peptide  
CC transmitters, defensins, growth factors, vasoactive peptides and  
CC receptors, binding proteins and malignancy associated proteins. The  
CC antisense oligonucleotides may be used in this way to treat disorders  
CC including respiratory obstruction (especially pulmonary obstruction  
CC and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or  
CC surfactant hypoproduction which are associated with a disease or  
CC condition selected from pulmonary vasoconstriction, inflammation,  
CC allergies, asthma, impeded respiration, respiratory distress syndrome  
CC (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary  
CC hypertension, emphysema, chronic obstructive pulmonary disease (COPD),  
CC pulmonary transplantation rejection, pulmonary infections, bronchitis,  
CC and/or cancer. AAF18434 to AAF21543 represent human polynucleotide  
CC fragments and antisense oligonucleotides used in the exemplification of  
CC the present invention  
XX  
SQ Sequence 22 BP; 0 A; 7 C; 14 G; 1 T; 0 U; 0 Other;  
  
Query Match 0.4%; Score 12.4; DB 1; Length 22;  
Best Local Similarity 72.7%; Pred. No. 6.1e+03;  
Matches 16; Conservative 0; Mismatches 6; Indels 0; Gaps 0;  
  
QY 470 GCCTGGCCGCGCCGCGCAGCC 491  
Db |||||  
22 GCCAGGCGCGCCGCGCCGCGC 1  
  
RESULT 5436  
AAH22188/c  
ID AAH22188 standard; DNA; 22 BP.

XX AAH22188;  
AC  
XX 20-AUG-2001 (first entry)  
XX  
DE Human hepatocyte auxin related 3'-(T-rich) primer D.  
XX  
KW Human; hepatocyte; auxin; liver; hepatitis; chronic hepatitis;  
KW liver fibrosis; cirrhosis; liver damage; primer; ss.  
XX  
OS Homo sapiens.  
XX  
PN CN1280985-A.  
XX  
PD 24-JAN-2001.  
XX  
PF 20-JUL-1999; 99CN-00110801.  
XX  
PR 20-JUL-1999; 99CN-00110801.  
XX  
PA (HOSP-) HOSPITAL NO 458 CHINESE PLA.  
XX  
PI Kong X, Yi X, Zeng P;  
XX  
DR WPI; 2001-291394/31.  
XX  
PT Novel recombinant human hepatocyte auxin, its preparation and clinical  
PT application.  
XX  
PS Example 1; Page 2 (disclosure); 13pp; Chinese.  
XX  
CC The present invention describes a differential indication PCR (polymerase  
CC chain reaction) technique which is used to obtain a new complete gene  
CC able to promote the repair of damaged liver cells and with substance  
CC total length of 0.7 kb by screening the cDNA library of human foetal  
CC liver. The induction expression of engineering bacteria, the separation  
CC and cracking of inclusion body and the process for restoring and  
CC decontaminating proteins are built up to obtain high purity recombinant  
CC human hepatocyte auxin. It can externally promote the reproduction of  
CC primary culture liver cells and liver cancer cells BEL-7402 and  
CC internally promote the synthesis of mouse liver cell DNA after CCL4 is  
CC damaged and the repair of liver cells. The method may be used to treat  
CC serious hepatitis, chronic hepatitis, liver fibrosis and cirrhosis. The  
CC present sequence represents a primer which is used in the exemplification  
CC of the present invention  
XX  
SQ Sequence 22 BP; 2 A; 3 C; 4 G; 13 T; 0 U; 0 Other;  
  
Query Match 0.4%; Score 12.4; DB 1; Length 22;  
Best Local Similarity 92.9%; Pred. No. 6.1e+03;  
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
  
QY 2786 AAAAAAAAAAAAAA 2799  
Db |||||  
22 ACAAAAAAAAAAAAAA 9  
  
RESULT 5437  
ABZ96312/c  
ID ABZ96312 standard; DNA; 22 BP.  
XX  
AC ABZ96312;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human C/EBP antisense fragment no.2172.  
XX  
KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.



XX Homo sapiens.  
OS WO200285308-A2.  
XX  
XX  
XX 31-OCT-2002.  
PD  
XX  
XX 23-APR-2002; 2002WO-US013135.  
PF  
XX  
XX 24-APR-2001; 2001US-0286137P.  
PR  
XX  
XX (EPIG-) EPIGENESIS PHARM INC.  
PA  
XX  
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
PI  
XX WPI; 2003-229219/22.  
DR  
XX  
XX Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
XX Disclosure; SEQ ID NO 11554; 872pp; English.  
PS  
XX  
XX The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
XX Sequence 22 BP; 0 A; 7 C; 14 G; 1 T; 0 U; 0 Other;  
SQ  
Query Match 0.4%; Score 12.4; DB 1; Length 22;  
Best Local Similarity 72.7%; Pred. No. 6.1e+03;  
Matches 16; Conservative 0; Mismatches 6; Indels 0; Gaps 0;  
QY 470 GCCTGGCCCGCGCCGAGGCC 491  
Db 22 GCCAGGCGCGCGCCCGCCGCC 1  
RESULT 5438  
AAX55048/c  
ID AAX55048 standard; DNA; 23 BP.  
XX  
AC AAX55048;  
XX  
DT 05-JUL-1999 (first entry)  
XX  
DE C/EBP-beta antisense oligonucleotide fragment.  
XX  
KW Antisense oligonucleotide; multiple target; antisense treatment;  
KW impaired respiration; inflammation; lung disease;  
KW pulmonary vasoconstriction; inflammation; allergic rhinitis;  
KW acute asthma; allergy; asthma; impeded respiration;  
KW respiratory distress syndrome; pain; cystic fibrosis;  
KW pulmonary hypertension; pulmonary vasoconstriction; emphysema;

KW chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma;  
KW colon cancer; breast cancer; lung cancer; pancreatic cancer;  
KW hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;  
KW prostate cancer; ss.  
XX  
OS Synthetic.  
XX  
XX WO9913886-A1.  
PN  
XX  
XX 25-MAR-1999.  
PD  
XX  
XX 17-SEP-1998; 98WO-US019419.  
PF  
XX  
XX 17-SEP-1997; 97US-0059160P.  
PR  
XX 09-JUN-1998; 98US-00093972.  
PR  
XX (UYEC-) UNIV EAST CAROLINA.  
PA  
XX  
XX Nyce JW;  
PI  
XX  
XX WPI; 1999-229400/19.  
DR  
XX  
XX New antisense oligonucleotides used in treatment of, e.g. pulmonary  
PT vasoconstriction.  
PT  
XX  
XX Disclosure; Page 70; 120pp; English.  
PS  
XX  
XX The specification describes antisense oligonucleotides (AAX52869-X55271)  
CC directed against at least 2 mRNAs selected from target genes, coding and  
CC non-coding regions of RNAs corresponding to target genes, gene initiation  
CC codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'  
CC -end and the juxta-section between coding and non-coding regions and all  
CC segments of RNAs encoding proteins associated with one or more diseases,  
CC conditions or mixtures. The antisense oligonucleotides may be derived  
CC from sequences AAX55272-74. These multiple target oligonucleotides  
CC (specifically AAX55180-271) can be used for the antisense treatment of  
CC diseases and conditions. Typical diseases and conditions are those  
CC associated with impaired respiration and inflammation, including lung  
CC diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis,  
CC acute asthma, allergies, asthma, impeded respiration, respiratory  
CC distress syndrome, pain, cystic fibrosis, pulmonary hypertension,  
CC pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary  
CC disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g.  
CC colon cancer, breast cancer, lung cancer, pancreatic cancer,  
CC hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, as  
CC well as all types of cancers which may metastasize or have metastasized  
CC to the lungs, including breast and prostate cancer  
XX  
SQ Sequence 23 BP; 0 A; 7 C; 14 G; 2 T; 0 U; 0 Other;  
Query Match 0.4%; Score 12.4; DB 1; Length 23;  
Best Local Similarity 72.7%; Pred. No. 6.1e+03;  
Matches 16; Conservative 0; Mismatches 6; Indels 0; Gaps 0;  
QY 470 GCCTGGCCCGCGCGCCGAGGCC 491  
Db 22 GCCAGGCGCGCGCCCGCCGCC 1  
RESULT 5439  
AAA34495/c  
ID AAA34495 standard; DNA; 23 BP.  
XX  
AC AAA34495;  
XX  
DT 28-JUL-2000 (first entry)  
XX  
DE Human adenosine receptor related polynucleotide SEQ ID NO:2184.  
XX  
KW Human; adenosine receptor; low adenosine antisense oligonucleotide;  
KW phosphorothioate; impaired respiration; inflammation; allergy;  
KW allergic disease; bronchoconstriction; inhibitor; antiinflammatory;  
KW antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway;



KW lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;  
KW respiratory distress syndrome; pain; cystic fibrosis; emphysema;  
KW pulmonary hypertension; chronic obstructive pulmonary disease; COPD;  
KW cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.  
XX  
OS Homo sapiens.  
XX WO200009525-A2.  
PN  
XX  
PD 24-FEB-2000.  
XX  
XX 03-AUG-1999; 99WO-US017712.  
PF  
XX  
XX 03-AUG-1998; 98US-0095212P.  
PR  
XX  
PA (UYEC-) UNIV EAST CAROLINA.  
XX  
XX Nyce JW;  
PI  
XX WPI; 2000-205971/18.  
DR  
XX  
XX New antisense oligonucleotides useful for treating e.g. pulmonary  
PT vasoconstriction, inflammation, allergies, asthma, hypertension,  
PT bronchitis, emphysema, respiratory distress syndrome, ischemia or  
PT cancers.  
XX  
PS Disclosure; Page 539; 1343pp; English.  
XX  
CC The present invention describes a new composition comprising an antisense  
CC oligonucleotide (ON) with low adenosine (up to 15%), which targets  
CC nucleic acids involved in bronchoconstriction, allergies, and/or  
CC inflammation. The ON can have antiinflammatory, antiallergic,  
CC antiasthmatic, cytostatic and analgesic activities. The compositions are  
CC useful for the treatment of diseases associated with inflammation,  
CC impaired airways, including lung disease and diseases whose secondary  
CC effects afflict the lungs of a subject. They can be used for treating  
CC e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma,  
CC impeded respiration, respiratory distress syndrome, pain, cystic  
CC fibrosis, pulmonary hypertension, emphysema, chronic obstructive  
CC pulmonary disease (COPD), and cancers such as leukaemias, lymphomas,  
CC carcinomas, and cancers which may metastasize to the lungs, including  
CC breast and prostate cancer. The reduction of the adenosine content of the  
CC ONs reduces side effects. The A-containing ONs break down with the  
CC release of deoxyadenosine which activates adenosine receptors causing  
CC bronchoconstriction and inflammation. AAA32313 to AAA35312 represent the  
CC nucleotide sequences given in the sequence listing from the present  
CC invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185  
CC sequences are also called SEQ ID NO:1 to 185, but the sequences differ  
CC from the previously named sequences. SEQ ID NO:11 to 1680 (AAA32323 to  
CC AAA33992) are specifically claimed ONs from the present invention. N.B.  
CC Sequences given in the disclosure of the present invention do not match  
CC up with their corresponding SEQ ID NO: sequences given in the sequence  
CC listing  
XX  
SQ Sequence 23 BP; 0 A; 7 C; 14 G; 2 T; 0 U; 0 Other;  
Query Match 0.4%; Score 12.4; DB 1; Length 23;  
Best Local Similarity 72.7%; Pred. No. 6.1e+03;  
Matches 16; Conservative 0; Mismatches 6; Indels 0; Gaps 0;  
QY 470 GCCTGGCCCGCCGCCGAGGCC 491  
DB 22 GCCAGGCGCCGCCGCCCGCC 1  
RESULT 5440  
AAZ47417  
ID AAZ47417 standard; DNA; 23 BP.  
XX  
AC AAZ47417;  
XX  
DT 06-MAR-2000 (first entry)  
XX

DE Probe 1 used to confirm the correct amplification of GST-Pi.  
XX  
KW Glutathione-S-transferase-Pi; GST-Pi; methylated; diagnose; bisulphite;  
KW cytosine deamination; prostate cancer; breast cancer; cervical cancer;  
KW liver cancer; PCR primer; ss.  
XX  
OS Synthetic.  
OS Homo sapiens.  
XX  
PN WO9955905-A1.  
XX  
PD 04-NOV-1999.  
XX  
XX 23-APR-1999; 99WO-AU000306.  
PF  
XX 23-APR-1998; 98AU-00003129.  
PR  
XX (CSIR ) COMMONWEALTH SCI & IND RES ORG.  
PA  
XX Clark SJ, Millar DS, Molloy PL;  
PI  
XX WPI; 2000-062041/05.  
DR  
XX  
XX Diagnosis and prognosis of diseases involving cytosine methylation of the  
PT glutathione-S-transferase gene, especially prostatic cancer.  
PT  
XX  
PS Claim 46; Page 71; 111pp; English.  
XX  
CC Sequences AAZ47417-Z47422 are used as probes to determine that any  
CC amplified PCR products of the invention are due to DNA in which all  
CC unmethylated cytosines are converted to uracils. The invention relates to  
CC a diagnostic or prognostic assay. The assay includes amplification of a  
CC target region of the glutathione-S-transferase (GST) Pi gene under  
CC conditions which result in amplification occurring only if at least one  
CC cytosine is methylated. The amplified sequence can then be subjected to  
CC analysis and abnormal cytosine methylation can then be detected. The  
CC target region of DNA is treated with a high concentration of bisulphite  
CC resulting in selective deamination of cytosine, converting it to uracil.  
CC Methylated cytosines are resistant to the chemical deamination, and  
CC therefore when PCR amplification is carried out on the target DNA,  
CC cytosines that were methylated in the original sample prior to bisulphite  
CC treatment will still be read as cytosine, while unmethylated cytosines  
CC will be read as thymine. PCR primers are designed to anneal to the target  
CC sequence after bisulphite treatment. The primers can be either selective  
CC or non-selective for methylated sites, non-selective primers avoid sites  
CC that may or may not be methylated. There is a strong correlation between  
CC the methylation of regulatory regions of genes and their lack of  
CC expression. Expression of the GST-Pi gene is lost in nearly all cases of  
CC prostate cancer. The method is used for the diagnosis of cancer,  
CC particularly of prostate, breast, cervix, or liver cancer  
XX  
SQ Sequence 23 BP; 17 A; 4 C; 0 G; 2 T; 0 U; 0 Other;  
Query Match 0.4%; Score 12.4; DB 1; Length 23;  
Best Local Similarity 72.7%; Pred. No. 6.1e+03;  
Matches 16; Conservative 0; Mismatches 6; Indels 0; Gaps 0;  
QY 2781 AATTGAAAAAATAACCAACAA 2802  
DB 2 AACCTAAAAATAACCAACAA 23  
RESULT 5441  
AAF20617/C  
ID AAF20617 standard; DNA; 23 BP.  
XX  
AC AAF20617;  
XX  
DT 14-MAR-2001 (first entry)  
XX  
DE Human C/EBP polynucleotide fragment #2184.  
XX  
KW Low adenosine antisense oligonucleotide; phosphorothioate; allergy;

KW human; airway disorder; bronchoconstriction; lung inflammation;  
KW surfactant depletion; respiratory; bronchodilator; antiinflammatory;  
KW immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic;  
KW respiratory obstruction; pulmonary obstruction; impeded respiration;  
KW surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;  
KW respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;  
KW pulmonary hypertension; emphysema; pulmonary transplantation rejection;  
KW chronic obstructive pulmonary disease; pulmonary infection; bronchitis;  
KW cancer; ss.  
XX  
OS Homo sapiens.  
XX WO200062736-A2.  
XX 26-OCT-2000.  
XX 24-MAR-2000; 2000WO-US008020.  
XX  
PR 06-APR-1999; 99US-0127958P.  
XX (UYEC-) UNIV EAST CAROLINA.  
PA (NYCE/) NYCE J W.  
XX  
PI Nyce JW;  
XX WPI; 2000-679539/66.  
DR  
XX Low adenosine (A) content antisense oligonucleotides which do not trigger  
PT adenosine receptors during metabolism, useful e.g. for treating cancers  
PT and respiratory obstructions.  
XX Claim 14; Page 264; 1592pp; English.  
XX  
CC The present invention describes low adenosine (A) content antisense  
CC oligonucleotides and compositions (I) comprising them. In the antisense  
CC oligonucleotides the A is replaced by a 'Universal' or alternative base.  
CC (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,  
CC immunosuppressive, antiasthmatic, hypotensive and cytostatic activities.  
CC The antisense oligonucleotides and (I) can be used to down-regulate the  
CC expression and or activity of target polypeptides associated with  
CC lung/respiratory disorders and malignancies, such as stimulating and  
CC activating peptide factors and transmitters, transcription factors,  
CC immunoglobulins and antibodies, antibody receptors, cytokines and  
CC chemokines, endogenously produced specific and non-specific enzymes,  
CC binding proteins, adhesion molecules and their receptors, cytokine and  
CC chemokine receptors, adenosine receptors, bradykinin receptors, central  
CC nervous system (CNS) and peripheral nervous and non-nervous system  
CC receptors, CNS and peripheral nervous and non-nervous system peptide  
CC transmitters, defensins, growth factors, vasoactive peptides and  
CC receptors, binding proteins and malignancy associated proteins. The  
CC antisense oligonucleotides may be used in this way to treat disorders  
CC including respiratory obstruction (especially pulmonary obstruction  
CC and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or  
CC surfactant hypoproduction which are associated with a disease or  
CC condition selected from pulmonary vasoconstriction, inflammation,  
CC allergies, asthma, impeded respiration, respiratory distress syndrome  
CC (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary  
CC hypertension, emphysema, chronic obstructive pulmonary disease (COPD),  
CC pulmonary transplantation rejection, pulmonary infections, bronchitis,  
CC and/or cancer. AAF18434 to AAF21543 represent human polynucleotide  
CC fragments and antisense oligonucleotides used in the exemplification of  
CC the present invention  
XX  
SQ Sequence 23 BP; 0 A; 7 C; 14 G; 2 T; 0 U; 0 Other;

Query Match 0.4%; Score 12.4; DB 1; Length 23;  
Best Local Similarity 72.7%; Pred. No. 6.1e+03;  
Matches 16; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

QY 470 GCCTGGCCCGCCGCCAGAGCC 491  
||| ||| | ||||| |||  
Db 22 GCCAGCGCGCCGCCCGCCGCC 1

RESULT 5442  
ABZ96311/c  
ID ABZ96311 standard; DNA; 23 BP.  
XX  
AC ABZ96311;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human C/EBP antisense fragment no.2171.  
XX

KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
XX

OS Homo sapiens.

PN WO200285308-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

XX (EPIG-) EPIGENESIS PHARM INC.

PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.

XX Disclosure; SEQ ID NO 11553; 872pp; English.

PS The invention relates to a novel pharmaceutical composition, which has a  
XX first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX

SQ Sequence 23 BP; 0 A; 7 C; 14 G; 2 T; 0 U; 0 Other;

Query Match 0.4%; Score 12.4; DB 1; Length 23;  
Best Local Similarity 72.7%; Pred. No. 6.1e+03;  
Matches 16; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

QY 470 GCCTGGCCCGCCGCCAGAGCC 491  
||| ||| | ||||| |||  
Db 22 GCCAGCGCGCCGCCCGCCGCC 1

RESULT 5443  
AAZ24999/C  
ID AAZ24999 standard; DNA; 24 BP.  
XX  
AC AAZ24999;  
XX  
DT 24-DEC-1999 (first entry)  
XX  
DE Sense probe to Fragile X syndrome gene.  
XX  
KW Trinucleotide repeat; myotonic-protein kinase; myotonic dystrophy; probe;  
in situ hybridisation; detection; expansion; Fragile X syndrome; ss.  
XX  
OS Synthetic.  
OS Homo sapiens.  
XX  
PN US5962332-A.  
XX  
PD 05-OCT-1999.  
XX  
PF 11-DEC-1995; 95US-00570155.  
XX  
PR 17-MAR-1994; 94US-00214823.  
PR 07-MAR-1995; 95US-00399499.  
XX  
PA (UYMA-) UNIV MASSACHUSETTS.  
XX  
PI Taneja KL, Singer RH;  
XX  
DR WPI; 1999-579615/49.  
XX  
PT Detection of trinucleotide repeats.  
XX  
PS Disclosure; Col 20; 18pp; English.  
XX  
CC This oligonucleotide is targeted to the CGG trinucleotide repeats found  
in the FMR1 gene. Excessive numbers of the trinucleotide repeats in the  
FMR1 gene leads to the disease Fragile X syndrome. This sequence is used  
as a sense oligonucleotide control probe for the hybridisation reaction.  
CC The invention relates to a method for the detection of trinucleotide  
repeat expansion, e.g. in the FMR1 gene or Mt-PK gene (leading to  
myotonic dystrophy) by in situ hybridization  
XX  
SQ Sequence 24 BP; 0 A; 6 C; 14 G; 2 T; 0 U; 2 Other;  
Query Match 0.4%; Score 12.4; DB 1; Length 24;  
Best Local Similarity 66.7%; Pred. No. 6e+03;  
Matches 16; Conservative 0; Mismatches 8; Indels 0; Gaps 0;  
QY 429 ACCCCCTGCACCGCCGCGGCCCA 452  
Db 24 ANCCGCCGCCGCCGCCGCCNA 1  
RESULT 5444  
AAC96355/C  
ID AAC96355 standard; DNA; 25 BP.  
XX  
AC AAC96355;  
XX  
DT 26-FEB-2001 (first entry)  
XX  
DE HLA DPB1 gene PCR primer #87.  
XX  
KW DNA sequence analysis; sequencing; protein sequence; protein structure;  
gene typing; organ donation; bacteria identification; 16s rRNA; HLA;  
KW human leukocyte antigen; PCR primer; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO200065088-A2.  
XX

PD 02-NOV-2000.  
XX  
PF 20-APR-2000; 2000WO-EP003636.  
XX  
PR 26-APR-1999; 99EP-00303215.  
XX  
PA (AMSH ) AMERSHAM PHARMACIA BIOTECH AB.  
XX  
PI Ulfendahl P, Wong K;  
XX  
DR WPI; 2000-679677/66.  
XX  
PT Identifying extendible primers for use in identification, or  
classfication of a nucleic acid of an organism, allele or gene such as  
class 1/2 HLA comprises identifying all possible nucleotide sequences of  
specific length.  
XX  
PS Claim 14; Page 50; 66pp; English.  
XX  
CC The present invention provides a method for identifying a set of  
extendible primers which can be used in the identification, typing and  
classification of genes. This can then be used to predict protein the  
sequence and structure, in organ donation to match the organ with the  
receiver, and to identify bacteria in a sample. The method can be used to  
type the human leukocyte antigen genes (HLA) and 16s rRNA genes in  
particular  
XX  
SQ Sequence 25 BP; 5 A; 2 C; 5 G; 13 T; 0 U; 0 Other;  
Query Match 0.4%; Score 12.4; DB 1; Length 25;  
Best Local Similarity 92.9%; Pred. No. 5.9e+03;  
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 2783 TTGAAAAA 2796  
Db 14 TTAATAAAAAA 1  
RESULT 5445  
AAZ49618/C  
ID AAZ49618 standard; DNA; 25 BP.  
XX  
AC AAZ49618;  
XX  
DT 07-APR-2000 (first entry)  
XX  
DE PCR primer-2 for synthesis of carrot CR16.1 fragment for plant promoter.  
XX  
KW PCR primer; synthetic DNA; plant promoter; CR16 fragment; carrot;  
KW transgenic plant; soybean glycinin; stearyl-ACP-desaturase gene;  
KW male sterility-related gene; ss.  
XX  
OS Daucus carota.  
XX  
PN EP976832-A2.  
XX  
PD 02-FEB-2000.  
XX  
PF 13-JUL-1999; 99EP-00113732.  
XX  
PR 15-JUL-1998; 98JP-00200372.  
XX  
PA (SUMO ) SUMITOMO CHEM CO LTD.  
XX  
PI Ishige F, Nishikawa S, Oeda K;  
XX  
DR WPI; 2000-128374/12.  
XX  
PT Novel promoter used to produce transgenic plants with higher expression  
of a desired gene.  
XX  
PS Example 1; Page 14; 24pp; English.  
XX

XX KW Human; apoptosis; CCR9; anti-tumour; tumour; cancer; diagnosis; primer;  
KW ss.  
XX OS Homo sapiens.  
XX OS JP2000210089-A.  
XX PN  
XX XX  
XX PD 02-AUG-2000.  
XX XX  
XX PF 18-NOV-1999; 99JP-00327885.  
XX XX  
XX PR 20-NOV-1998; 98JP-00330302.  
XX XX  
XX PA (ASAK ) ASAHI BREWERIES LTD.  
XX XX  
XX DR WPI; 2000-614556/59.  
XX PT  
XX PT Gene and its encoded protein that induce apoptosis, useful for producing  
XX PT a malignant tumor gene treating agent and for the diagnosis on the  
XX PT resistance of cancer cells against an anticancer agent.  
XX XX  
XX PS Example 1; Page 4; 13pp; Japanese.  
XX CC The present invention describes the human CCR9 protein, which is an  
XX CC apoptosis related protein having apoptosis-inducing activity. Human CCR9  
XX CC has anti-tumour activity, and can be used to produce a malignant tumour  
XX CC gene treating agent. The CCR9 gene and protein can be used for the  
XX CC diagnosis of the resistance of cancer cells against an anticancer agent.  
XX CC The present sequence represents a primer which is used in an example from  
XX CC the present invention  
XX SQ Sequence 16 BP; 2 A; 1 C; 1 G; 11 T; 0 U; 1 Other;  
  
Query Match 0.4%; Score 11.6; DB 1; Length 16;  
Best Local Similarity 91.7%; Pred. No. 5.7e+03;  
Matches 11; Conservative 1; Mismatches 0; Indels 0; Gaps 0;  
  
QY 2785 GAAAAAAAAAAAA 2796  
Db :|||||  
16 KAAAAAAAAAAAA 5  
  
RESULT 5590  
AAA97561/c  
ID AAA97561 standard; DNA; 16 BP.  
XX AC AAA97561;  
XX DT 29-JAN-2001 (first entry)  
XX DE Reverse transcription primer used to isolate human mtHSP75.  
XX KW Human mitochondria-localised heat shock protein 75; mitochondrial HSP75;  
KW mtHSP75; quantitative detection; expression level; cancer; tumour;  
KW anticancer drug selection; prognosis; platinum complex compound;  
KW cisplatin; reverse transcription primer; ss.  
XX OS Synthetic.  
XX XX  
XX PN JP2000224989-A.  
XX PD 15-AUG-2000.  
XX XX  
XX PF 20-NOV-1998; 98JP-00330309.  
XX XX  
XX PR 20-NOV-1998; 98JP-00330309.  
XX XX  
XX PA (ASAK ) ASAHI BREWERIES LTD.  
XX XX  
XX DR WPI; 2000-605127/58.  
XX XX  
XX PT A method for sensitivity test to anti-cancer agents.

XX PS Example 1; Page 3; 7pp; Japanese.  
XX XX  
XX CC The invention relates to a novel method for testing the sensitivity of  
XX CC cancer cells to anti-cancer agents. The method comprises quantitative  
XX CC detection of a mitochondria-localised heat shock protein 75 (mtHSP75)  
XX CC gene (mtHSP75 cDNA given in AAA97560). Cancer cells expressing high  
XX CC levels of mtHSP75 are more likely to be resistant to anti-cancer agents,  
XX CC while those expressing low levels are more likely to be susceptible to  
XX CC such agents. The invention also relates to the use of RNA complementary  
XX CC to mtHSP75 or an mtHSP75 gene fragment in the method of the invention,  
XX CC the use of Northern blotting to detect mtHSP75 RNA, and the use of  
XX CC Western blotting to detect the mtHSP75 gene product. The method of the  
XX CC invention may particularly be used to test the sensitivity of cancer  
XX CC cells to platinum complex compounds, especially cisplatin. The invention  
XX CC provides for the selection of anti-cancer agents likely to be effective  
XX CC against a tumour in a particular individual. The present sequence  
XX CC represents a reverse transcription primer used to generate human mtHSP75  
XX CC cDNA in an exemplification of the invention  
XX SQ Sequence 16 BP; 2 A; 1 C; 1 G; 11 T; 0 U; 1 Other;  
  
Query Match 0.4%; Score 11.6; DB 1; Length 16;  
Best Local Similarity 91.7%; Pred. No. 5.7e+03;  
Matches 11; Conservative 1; Mismatches 0; Indels 0; Gaps 0;  
  
QY 2785 GAAAAAAAAAAAA 2796  
Db :|||||  
16 KAAAAAAAAAAAA 5  
  
Search completed: June 10, 2004, 12:19:49  
Job time : 151 secs





CC blot hybridisation to identify or detect the sequence or specific  
CC mutations of any gene, in mapping the 5' termini of mRNA molecules by  
CC primer extensions or in screening cDNA or genomic libraries or subclones  
CC for additional subclones containing segments of DNA that have been  
CC isolated and previously sequenced. The sequence presented is one of the  
CC nucleic acid probes incorporated in the microarray. Note: The sequence  
CC data for this patent can also be obtained in electronic format directly  
CC from USPTO at seqdata.uspto.gov/sequence.html  
XX  
SQ Sequence 25 BP; 12 A; 6 C; 3 G; 4 T; 0 U; 0 Other;  
  
Query Match 0.4%; Score 11.8; DB 1; Length 25;  
Best Local Similarity 86.7%; Pred. No. 6e+03;  
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
Qy 1248 AATTCACAGAACTTC 1262  
Db 3 AATACACAGAACCTC 17  
  
RESULT 5587  
ABL43221  
ID ABL43221 standard; DNA; 25 BP.  
XX  
AC ABL43221;  
XX  
DT 11-APR-2002 (first entry)  
XX  
DE Human chromosome 1p36-35 PCR primer SEQ ID NO:265.  
XX  
KW Human; chromosome 1p36-35; chromosome 21q22.1; genetic analysis; genome;  
KW PCR primer; ss.  
XX  
OS Homo sapiens.  
XX  
PN JP2001321190-A.  
XX  
PD 20-NOV-2001.  
XX  
PF 12-MAR-2001; 2001JP-00068285.  
XX  
PR 10-MAR-2000; 2000JP-00066716.  
XX  
PA (RIKA ) RIKAGAKU KENKYUSHO.  
PA (GENO-) GENOTEX YG.  
XX  
DR WPI; 2002-144136/19.  
XX  
PT Arraying genome clones.  
XX  
PS Claim 4; Page 10; 528pp; Japanese.  
XX  
CC The present invention describes a method of arraying genome clones. The  
CC method comprises: (a) clones of the genomic libraries contained in  
CC multiwell plates numbered for discrimination are mixed in each of the  
CC multiwell plates; (b) a primer designed based on the chromosome marker  
CC sequence is added to the mixture to carry out an amplification reaction;  
CC (c) a signal corresponding to the marker is detected from the resultant  
CC amplified product to specify the discrimination Nos. of the multiwell  
CC plates containing the clones having said marker sequence; (d) the order  
CC of the markers is changed so that the same discrimination Nos. succeed to  
CC the maximum in the specified discrimination Nos. to array the multiwell  
CC plates; (e) the clones in the multiwell plates of the specified  
CC discrimination Nos. are mixed respectively in each wells of longitudinal  
CC and lateral directions; (f) the mixed clones are cultured and the  
CC resultant cultures are amplified by using the above primer; (g) signals  
CC are detected from the amplified products; (h) the clones in the multiwell  
CC plates are specified from the detected result; and (i) the clones are  
CC reconstituted as the positions on the chromosome and arrayed. The  
CC microarray is useful for gene analysis. ABL42957 to ABL45322 represent  
CC PCR primers for human chromosome 1p36-35 DNA, and ABL45323 to ABL45634  
CC represent PCR primers for human chromosome 21q22.1, which are  
CC specifically claimed for use in the present invention

XX  
SQ Sequence 25 BP; 13 A; 3 C; 4 G; 5 T; 0 U; 0 Other;  
  
Query Match 0.4%; Score 11.8; DB 1; Length 25;  
Best Local Similarity 69.6%; Pred. No. 6e+03;  
Matches 16; Conservative 0; Mismatches 7; Indels 0; Gaps 0;  
  
Qy 2508 ACATCATAGGTTTATTTCATAT 2530  
Db 1 AAAACAGAGGTTTCAATAAAT 23  
  
RESULT 5588  
AAA99205/c  
ID AAA99205 standard; DNA; 16 BP.  
XX  
AC AAA99205;  
XX  
DT 23-JAN-2001 (first entry)  
XX  
DE Human apoptosis related protein CCR9 related primer #1.  
XX  
KW Human; apoptosis; CCR9; anti-tumour; tumour; cancer; diagnosis; primer;  
KW ss.  
XX  
OS Homo sapiens.  
XX  
PN JP2000210089-A.  
XX  
PD 02-AUG-2000.  
XX  
PF 18-NOV-1999; 99JP-00327885.  
XX  
PR 20-NOV-1998; 98JP-00330302.  
XX  
PA (ASAK ) ASahi BREWERIES LTD.  
XX  
DR WPI; 2000-614556/59.  
XX  
PT Gene and its encoded protein that induce apoptosis, useful for producing  
PT a malignant tumor gene treating agent and for the diagnosis on the  
PT resistance of cancer cells against an anticancer agent.  
XX  
PS Example 1; Page 4; 13pp; Japanese.  
XX  
CC The present invention describes the human CRR9 protein, which is an  
CC apoptosis related protein having apoptosis-inducing activity. Human CCR9  
CC has anti-tumour activity, and can be used to produce a malignant tumour  
CC gene treating agent. The CCR9 gene and protein can be used for the  
CC diagnosis of the resistance of cancer cells against an anticancer agent.  
CC The present sequence represents a primer which is used in an example from  
CC the present invention  
XX  
SQ Sequence 16 BP; 2 A; 1 C; 1 G; 11 T; 0 U; 1 Other;  
  
Query Match 0.4%; Score 11.6; DB 1; Length 16;  
Best Local Similarity 91.7%; Pred. No. 5.7e+03;  
Matches 11; Conservative 1; Mismatches 0; Indels 0; Gaps 0;  
  
Qy 2785 GAAAAAATAAAAA 2796  
Db 16 KAAAAAATAAAAA 5  
  
RESULT 5589  
AAA99206/c  
ID AAA99206 standard; DNA; 16 BP.  
XX  
AC AAA99206;  
XX  
DT 23-JAN-2001 (first entry)  
XX  
DE Human apoptosis related protein CCR9 related primer #2.

XX Example 11; Page 70; 122pp; Japanese.  
PS  
XX AAC90701 to AAC90715 encode the human secretory proteins given in  
CC AAB36661 to AAB36675. The proteins can have cytotstatic, anti-  
CC inflammatory, haematopoietic, anti-coagulant, immunomodulatory and  
CC hepatotropic activities, and can be used as cell migratory agents, cell  
CC proliferation- stimulants and cell differentiation-inducers. The proteins  
CC are useful in the treatment and prevention of diseases such as cancer,  
CC lung function disorder, liver function disorder, gastrointestinal  
CC disorder and immune diseases. AAC90716 to AAC90755 represent PCR primers  
CC which are used in the exemplification of the present invention  
XX

SQ Sequence 25 BP; 1 A; 7 C; 10 G; 7 T; 0 U; 0 Other;

Query Match 0.4%; Score 11.8; DB 1; Length 25;  
Best Local Similarity 86.7%; Pred. No. 6e+03;  
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 604 CGACCTGCTGCTGCC 618  
Db |||||||  
6 CGGCCTGCTGCTGGC 20

RESULT 5585  
ACI62001/c  
ID ACI62001 standard; DNA; 25 BP.

XX ACI62001;

XX 13-OCT-2003 (first entry)

DE Human microarray DNA oligonucleotide SEQ ID NO 61992.

XX EST; ss; probe; expressed sequence tag; microarray; gene expression;  
KW genetic variation; biallelic marker; polymorphism; human;  
KW cross-species comparison.

XX Homo sapiens.

XX US2003104410-A1.

XX 05-JUN-2003.

XX 15-MAR-2002; 2002US-00098263.

XX 16-MAR-2001; 2001US-0276759P.

XX (AFFY-) AFFYMETRIX INC.

XX Mittmann MP;

XX WPI; 2003-567953/53.

XX New array of nucleic acid probes, useful for in situ hybridization, in  
PT Southern, Northern or dot-blot hybridization to identify or detect the  
PT sequence or specific mutations of any gene.

PS Claim 1; SEQ ID NO 61992; 9pp; English.

XX The invention discloses a microarray comprising a plurality of nucleic  
CC acid probes including one of 2,018,500 fully defined sequences, or its  
CC perfect match, perfect mismatch, antisense match or antisense mismatch.  
CC Also disclosed is a method of gene expression analysis. The array is used  
CC in monitoring gene expression levels by hybridisation to a DNA library,  
CC in analysis of genetic variation or in hybridisation of tag-labelled  
CC compounds. The nucleic acid probes are specifically designed for analysis  
CC of at least one target sequence. The method of analysis comprises  
CC hybridising at least one or more nucleic acids to at least two or more  
CC nucleic acid probes and detecting the hybridisation. The nucleic acid  
CC probes are attached to a solid support. The analysis comprises monitoring  
CC gene expression levels, identifying biallelic markers or polymorphisms,  
CC or family members of a gene and a cross-species comparison. Each of the

CC nucleic acids further comprises a tag sequence. The array of nucleic acid  
CC probes is useful in in situ hybridisation, in Southern, Northern or dot-  
CC blot hybridisation to identify or detect the sequence or specific  
CC mutations of any gene, in mapping the 5' termini of mRNA molecules by  
CC primer extensions or in screening cDNA or genomic libraries or subclones  
CC for additional subclones containing segments of DNA that have been  
CC isolated and previously sequenced. The sequence presented is one of the  
CC nucleic acid probes incorporated in the microarray. Note: The sequence  
CC data for this patent can also be obtained in electronic format directly  
CC from USPTO at seqdata.uspto.gov/sequence.html

XX Sequence 25 BP; 4 A; 4 C; 6 G; 11 T; 0 U; 0 Other;

Query Match 0.4%; Score 11.8; DB 1; Length 25;  
Best Local Similarity 69.6%; Pred. No. 6e+03;  
Matches 16; Conservative 0; Mismatches 7; Indels 0; Gaps 0;

QY 925 ACCTGAATGCTTAAATGCCTCGT 947  
Db |||||||  
25 ACCTGAACACTGAAAGACAAAGT 3

RESULT 5586  
ACK11064  
ID ACK11064 standard; DNA; 25 BP.

XX ACK11064;

XX 14-OCT-2003 (first entry)

DE Human microarray DNA oligonucleotide SEQ ID NO 111045.

XX EST; ss; probe; expressed sequence tag; microarray; gene expression;  
KW genetic variation; biallelic marker; polymorphism; human;  
KW cross-species comparison.

XX Homo sapiens.

XX US2003104410-A1.

XX 05-JUN-2003.

XX 15-MAR-2002; 2002US-00098263.

XX 16-MAR-2001; 2001US-0276759P.

XX (AFFY-) AFFYMETRIX INC.

XX Mittmann MP;

XX WPI; 2003-567953/53.

XX New array of nucleic acid probes, useful for in situ hybridization, in  
PT Southern, Northern or dot-blot hybridization to identify or detect the  
PT sequence or specific mutations of any gene.

PS Claim 1; SEQ ID NO 111045; 9pp; English.

XX The invention discloses a microarray comprising a plurality of nucleic  
CC acid probes including one of 2,018,500 fully defined sequences, or its  
CC perfect match, perfect mismatch, antisense match or antisense mismatch.  
CC Also disclosed is a method of gene expression analysis. The array is used  
CC in monitoring gene expression levels by hybridisation to a DNA library,  
CC in analysis of genetic variation or in hybridisation of tag-labelled  
CC compounds. The nucleic acid probes are specifically designed for analysis  
CC of at least one target sequence. The method of analysis comprises  
CC hybridising at least one or more nucleic acids to at least two or more  
CC nucleic acid probes and detecting the hybridisation. The nucleic acid  
CC probes are attached to a solid support. The analysis comprises monitoring  
CC gene expression levels, identifying biallelic markers or polymorphisms,  
CC or family members of a gene and a cross-species comparison. Each of the  
CC nucleic acids further comprises a tag sequence. The array of nucleic acid  
CC probes is useful in in situ hybridisation, in Southern, Northern or dot-





XX The present invention provides a method of diagnosing a vascular disease  
CC in an individual, involving determining the sequence at various  
CC polymorphic sites within the human thrombospondin 1 and thrombospondin 4  
CC genes. The sequences at a number of polymorphic sites are also provided  
CC in the specification. In particular, the method can be used in the  
CC diagnosis of atherosclerosis, myocardial infarction, coronary heart  
CC disease, stroke, peripheral vascular diseases, venous thromboembolism and  
CC pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also  
CC useful in forensics, paternity testing, genetic analysis and phenotype  
CC correlations to diseases. The present sequence is an example of one of  
CC the human gene SNPs shown in the specification  
XX  
SQ Sequence 21 BP; 12 A; 1 C; 5 G; 3 T; 0 U; 0 Other;  
  
Query Match 0.4%; Score 11.8; DB 1; Length 21;  
Best Local Similarity 86.7%; Pred. No. 6.5e+03;  
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 1495 GAAATGGAGAAACA 1509  
Db ||||| ||||| ||  
5 GAAAGAGAGAGAAAA 19  
  
RESULT 5580  
ADD21875  
ID ADD21875 standard; DNA; 22 BP.  
XX  
AC ADD21875;  
XX  
DT 15-JAN-2004 (first entry)  
DE Protein translation efficiency-related DNA sequence #59.  
XX nucleotide production; translation efficiency; protein synthesis; ds.  
KW Unidentified.  
XX  
XX WO2003056009-A1.  
XX 10-JUL-2003.  
XX 27-DEC-2002; 2002WO-JP013756.  
XX 27-DEC-2001; 2001JP-00396941.  
XX (ENDO/) ENDO Y.  
XX Endo Y, Sawasaki T;  
PI WPI; 2003-618079/58.  
XX  
XX Preparing translation controlling nucleotides used for increased  
PT efficiency during protein synthesis.  
XX  
PS Claim 11; Page 55; 87pp; Japanese.  
XX  
CC The invention comprises a method for preparing nucleotides that control  
CC translation efficiency of proteins. The nucleotides of the invention are  
CC useful for increasing efficiency during protein synthesis. The present  
CC DNA sequence is used in the exemplification of the invention.  
XX  
SQ Sequence 22 BP; 4 A; 4 C; 0 G; 14 T; 0 U; 0 Other;  
  
Query Match 0.4%; Score 11.8; DB 1; Length 22;  
Best Local Similarity 86.7%; Pred. No. 6.4e+03;  
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 2178 TTTTCTTTTAACTTT 2192  
Db ||||| ||||| |||||  
2 TTTTCTTTTAACTTT 16

RESULT 5581  
ABK90968  
ID ABK90968 standard; DNA; 23 BP.  
XX  
AC ABK90968;  
XX  
DT 05-NOV-2002 (first entry)  
DE PCR primer, 22164, used to amplify human VH3 gene.  
XX  
KW Human; PCR; primer; ss; antiHIV; chimeric protein; HIV-1;  
KW human immunodeficiency virus-1; envelope glycoprotein; env; gp120; CD4;  
KW cellular receptor; immunoglobulin; Ig; V1; V2; variable region;  
KW variable region-like membrane distal domain; antibody; heavy chain; VH;  
KW VH3; gene therapy; HIV infection; virus replication.  
XX  
OS Homo sapiens.  
OS Synthetic.  
XX  
PN WO200259258-A2.  
XX  
PD 01-AUG-2002.  
XX  
PF 22-JAN-2002; 2002WO-IL000060.  
XX  
PR 22-JAN-2001; 2001IL-00141023.  
XX  
PA (GAVI-) GAVISH-GALILEE BIO APPL LTD.  
XX  
PI Gross G, Meyuhas R;  
XX  
XX WPI; 2002-608450/65.  
XX  
PT New nucleic acid molecule encoding chimeric proteins with binding  
PT specificity for a site on HIV envelope glycoprotein gp120 and a site on  
PT gp120 protein or on the extracellular portion of human CD4, for  
PT preventing or treating HIV infection.  
XX  
PS Example 4; Page 29; 48pp; English.  
XX  
CC The invention discloses a nucleic acid molecule encoding a functional  
CC chimeric protein with binding specificity for at least two different  
CC sites. At least one site is on the human immunodeficiency virus-1 (HIV-1)  
CC envelope glycoprotein (env), gp120, and the other site is either on the  
CC gp120 protein or on the extracellular portion of human CD4, the major  
CC cellular receptor for HIV. The chimeric protein essentially comprises a  
CC first binding region of a soluble extracellular portion of human CD4,  
CC consisting of the immunoglobulin (Ig) variable region of a membrane  
CC distal domains (V1 and V2) and a second binding region of a variable  
CC region of an antibody heavy chain (VH), encoded by the VH3 gene, which is  
CC capable of being attached to an adjacent and non-overlapping site on the  
CC gp120 protein, or to a site on the extracellular portion of human CD4,  
CC and is capable of increasing the capacity of the extracellular portion of  
CC human CD4 to interact with gp120 and to block the interaction of HIV with  
CC membranal CD4. These two binding regions are physically connected by a  
CC linker region. The chimeric protein of the invention is useful for gene  
CC therapy and for preventing and treating an HIV infection and for  
CC neutralising and inhibiting virus replication and infectivity in a  
CC subject, preferably a mammal. The sequence presented is the PCR primer,  
CC 22164, which was used to amplify the human VH3 gene, used in the  
CC construction of the VH3-CD4 (V1 and V2) chimeric protein  
XX  
SQ Sequence 23 BP; 3 A; 3 C; 11 G; 6 T; 0 U; 0 Other;  
  
Query Match 0.4%; Score 11.8; DB 1; Length 23;  
Best Local Similarity 86.7%; Pred. No. 6.3e+03;  
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 2686 GAAATGGAGATTGG 2700  
Db ||||| ||||| |||||  
7 GAGATGGAGTTTGG 21

PT sequence to at least one end of DNA fragments.  
XX  
PS Example 2; Page 42; 120pp; English.  
XX  
CC This invention relates to a novel method for preparing DNA molecules that  
CC are useful in genomics, molecular biology and particularly for sequencing  
CC purposes. Specifically, the invention describes preparing DNA fragments  
CC from the random fragmentation of a parent DNA molecule, attaching a  
CC primer to at least one end of each fragment to produce primer linked  
CC fragments such that this plurality can be amplified as a whole.  
CC Accordingly, this method prepares DNA templates that provide more  
CC efficient sequencing for difficult DNA molecules, higher sequence quality  
CC and longer reads. Furthermore, applications of this method include  
CC conditioning the 3' end or providing 3' exonuclease activity to the end  
CC of a DNA molecule, detecting a damaged DNA molecule and repairing the 3'  
CC end, and preparing a DNA probe. This oligonucleotide sequence is the S36  
CC primer used for positional amplification and sequencing of an Escherichia  
CC coli (E. coli) genomic region. Specifically, the S36 primer is used in  
CC the primary amplification of contig 13 of the E. coli genome, a method of  
CC the invention  
XX  
SQ Sequence 21 BP; 6 A; 8 C; 3 G; 4 T; 0 U; 0 Other;  
  
Query Match 0.4%; Score 11.8; DB 1; Length 21;  
Best Local Similarity 86.7%; Pred. No. 6.5e+03;  
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 792 GTCAGAAGGAGCTGG 806  
Db 15 GTCAGAATGCGCTGG 1  
  
RESULT 5578  
AAF96326/c  
ID AAF96326 standard; DNA; 21 BP.  
XX  
AC AAF96326;  
XX  
DT 06-JUN-2001 (first entry)  
XX  
DE Human gene single nucleotide polymorphism #1087.  
XX  
KW Human; variant thrombospondin 1; variant thrombospondin 4; SNP;  
KW polymorphism; vascular disease; coronary artery disease; forensics;  
KW myocardial infarction; atherosclerosis; stroke; venous thromboembolism;  
KW pulmonary embolism; paternity test; ds.  
XX  
OS Homo sapiens.  
XX  
FH Key Location/Qualifiers  
FT Variation replace(11,A)  
FT /\*tag= a  
FT /standard\_name= "single nucleotide polymorphism"  
XX  
PN WO200118250-A2.  
XX  
PD 15-MAR-2001.  
XX  
PF 07-SEP-2000; 2000WO-US024503.  
XX  
PR 10-SEP-1999; 99US-0153357P.  
PR 26-JUL-2000; 2000US-0220947P.  
PR 16-AUG-2000; 2000US-0225724P.  
XX  
PA (WHED ) WHITEHEAD INST BIOMEDICAL RES.  
PA (MILL-) MILLENNIUM PHARM INC.  
XX  
PI Lander ES, Gargill M, Ireland JS, Bolk S, Daley GQ, Mccarthy JJ;  
XX WPI; 2001-226749/23.  
XX  
PT Nucleic acids comprising single nucleotide polymorphisms, useful in  
PT applications such as forensics, paternity testing, medicine, genetic

PT analysis and phenotype correlations to diseases such as diabetes and  
PT atherosclerosis.  
XX  
PS Example; Page 126; 242pp; English.  
XX  
CC The present invention provides a method of diagnosing a vascular disease  
CC in an individual, involving determining the sequence at various  
CC polymorphic sites within the human thrombospondin 1 and thrombospondin 4  
CC genes. The sequences at a number of polymorphic sites are also provided  
CC in the specification. In particular, the method can be used in the  
CC diagnosis of atherosclerosis, myocardial infarction, coronary heart  
CC disease, stroke, peripheral vascular diseases, venous thromboembolism and  
CC pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also  
CC useful in forensics, paternity testing, genetic analysis and phenotype  
CC correlations to diseases. The present sequence is an example of one of  
CC the human gene SNPs shown in the specification  
XX  
SQ Sequence 21 BP; 7 A; 6 C; 4 G; 4 T; 0 U; 0 Other;  
  
Query Match 0.4%; Score 11.8; DB 1; Length 21;  
Best Local Similarity 86.7%; Pred. No. 6.5e+03;  
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 2697 TTGGAATTGAACCTCT 2711  
Db 21 TTGGAATTGACCTCT 7  
  
RESULT 5579  
AAF96504  
ID AAF96504 standard; DNA; 21 BP.  
XX  
AC AAF96504;  
XX  
DT 06-JUN-2001 (first entry)  
XX  
DE Human gene single nucleotide polymorphism #1265.  
XX  
KW Human; variant thrombospondin 1; variant thrombospondin 4; SNP;  
KW polymorphism; vascular disease; coronary artery disease; forensics;  
KW myocardial infarction; atherosclerosis; stroke; venous thromboembolism;  
KW pulmonary embolism; paternity test; ds.  
XX  
OS Homo sapiens.  
XX  
FH Key Location/Qualifiers  
FT Variation replace(11,C)  
FT /\*tag= a  
FT /standard\_name= "single nucleotide polymorphism"  
XX  
PN WO200118250-A2.  
XX  
PD 15-MAR-2001.  
XX  
PF 07-SEP-2000; 2000WO-US024503.  
XX  
PR 10-SEP-1999; 99US-0153357P.  
PR 26-JUL-2000; 2000US-0220947P.  
PR 16-AUG-2000; 2000US-0225724P.  
XX  
PA (WHED ) WHITEHEAD INST BIOMEDICAL RES.  
PA (MILL-) MILLENNIUM PHARM INC.  
XX  
PI Lander ES, Gargill M, Ireland JS, Bolk S, Daley GQ, Mccarthy JJ;  
XX WPI; 2001-226749/23.  
XX  
PT Nucleic acids comprising single nucleotide polymorphisms, useful in  
PT applications such as forensics, paternity testing, medicine, genetic  
PT analysis and phenotype correlations to diseases such as diabetes and  
PT atherosclerosis.  
XX  
PS Example; Page 136; 242pp; English.

XX 24-MAR-1997; 97WO-US004703.  
PF  
XX  
PR 26-MAR-1996; 96US-0014089P.  
XX  
XX (LYNX-) LYNX THERAPEUTICS INC.  
PA  
XX  
PI Zupi G;  
XX  
DR WPI; 1997-489662/45.  
XX

XX Inhibiting proliferation of human melanoma cells with anti-c-myc  
PT oligo:nucleotide(s) - particularly used together with cis-platin,  
PT inhibits metastasis, induces regression or prevents further growth.  
XX  
PS Claim 1; Page 22; 68pp; English.

XX This c-myc oligonucleotide is complementary to a sequence of human c-myc  
CC mRNA and is used for inhibiting the proliferation of human melanoma cells  
CC (HMC). The c-myc oligonucleotide is at least 10 bases long and inhibits  
CC proliferation of HMC by at least 10 percent at 10 mu M, when the cells  
CC are cultured at 37 degree. C in presence of serum. The method is  
CC particularly used to treat human melanoma, and inhibits metastasis,  
CC promotes regression or prevents any increase in tumour mass. The c-myc  
CC oligonucleotide can be used together with cis-platin and which then  
CC reduces resistance of tumour cells to cis-platin. The oncogene c-myc is  
CC found to be essential for growth and metastasis of melanoma, and the c-  
CC myc oligonucleotides are designed to target double-stranded DNA or single  
CC -stranded RNA. A combination of c-myc oligonucleotide and cis-platin is  
CC more effective than either component used alone

XX Sequence 20 BP; 4 A; 6 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 11.8; DB 1; Length 20;  
Best Local Similarity 86.7%; Pred. No. 6.5e+03;  
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 653 GAGAACCTGGGCTC 667  
DB ||||| ||||| ||||| ||||| |||||  
6 GAGCACCAGGGCTC 20

RESULT 5576  
ABZ89225  
ID ABZ89225 standard; DNA; 20 BP.  
XX  
AC ABZ89225;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiqunone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.  
OS  
XX WO200285308-A2.  
PN  
XX 31-OCT-2002.  
PD  
XX 23-APR-2002; 2002WO-US013135.  
XX  
PF 24-APR-2001; 2001US-0286137P.  
XX  
PR (EPIC-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;

XX  
DR  
XX

WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiqunone.

XX Disclosure; SEQ ID NO 4467; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiqunone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of ubiqunone or  
CC receptor, producing bronchodilation, increasing levels of ubiqunone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences

XX Sequence 20 BP; 9 A; 1 C; 1 G; 9 T; 0 U; 0 Other;

Query Match 0.4%; Score 11.8; DB 1; Length 20;  
Best Local Similarity 86.7%; Pred. No. 6.5e+03;  
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 2179 TTTTITTTTAACTTTG 2193  
DB ||||| ||||| ||||| ||||| |||||  
6 TTATTTTAACTTG 20

RESULT 5577  
AAL56640/c  
ID AAL56640 standard; DNA; 21 BP.  
XX  
AC AAL56640;  
XX  
DT 09-OCT-2003 (first entry)  
XX  
DE S36 primer to amplify contig 13 of the Escherichia coli genome.

XX Genomics; DNA sequencing; random fragmentation; primer linked fragment;  
KW S36; positional amplification; PCR; primer; ss.

XX Escherichia coli.

XX WO2003050242-A2.

XX 19-JUN-2003.

XX 13-NOV-2002; 2002WO-US037322.

XX 13-NOV-2001; 2001US-0338224P.

XX (RUBI-) RUBICON GENOMICS INC.

XX Makarov VL, Sleptsova I, Kamberov E, Bruening E;

XX WPI; 2003-532900/50.

XX Preparing a DNA molecule, useful in genomics, molecular biology and  
PT sequencing, comprises attaching a primer having substantially known

PN WO9632966-A1.  
XX 24-OCT-1996.  
PD  
XX  
PF 19-APR-1996; 96WO-US005334.  
XX  
PR 19-APR-1995; 95US-00424991.  
XX  
PA (UYJE-) UNIV JEFFERSON THOMAS.  
XX  
PI Zalewski A, Shi Y;  
XX WPI; 1996-485560/48.  
DR  
XX  
PT Use of anti:sense cpds. to inhibit inappropriate synthesis - in tissue of  
PT extracellular matrix proteins, particularly collagen, esp. type I and  
PT type III.  
XX  
PS Claim 58; Page 64; 103pp; English.  
XX  
CC AAT60643, and AAT60647-T60653 represent antisense oligonucleotides  
CC specific for a nuclear proto-oncogene. These sequences are used in a  
CC composition of the invention, for inhibiting synthesis of extracellular  
CC matrix proteins. These sequences can also be used in the methods of the  
CC invention. The methods of the invention all involve using at least one of  
CC these sequences to prevent or treat a disease. The methods are for  
CC preventing failure of a haemodialysis access site (HAS) of a  
CC haemodialysis patient, for treating vascular grafts and/or in an ex vivo  
CC method for preventing failure of vascular grafts made with veins, and for  
CC inhibiting the synthesis of extracellular matrix proteins in a human  
CC tissue. Other methods of the invention are for treating sclerotic  
CC disorders, for reducing scar formation in a human tissue, and for  
CC inhibiting formation of unwanted fibrous connective tissue in a human.  
CC The methods relate to the use of certain antisense compounds to inhibit  
CC the inappropriate synthesis in a tissue of extracellular matrix proteins,  
CC particularly collagen, and more particularly collagens type I and III.  
CC The inappropriate and/or excessive synthesis of extracellular matrix  
CC proteins can result in medical conditions, including sclerotic disorders,  
CC vascular restenosis, or atherosclerosis, atherogenesis, kaloid disease,  
CC liver cirrhosis, rheumatological disorders of the joints, loss of  
CC arteriovenous and venous graft potency, post-surgical scarring,  
CC reconstructive surgery and the like, generally found in human subjects  
XX  
SQ Sequence 20 BP; 4 A; 6 C; 7 G; 3 T; 0 U; 0 Other;  
  
Query Match 0.4%; Score 11.8; DB 1; Length 20;  
Best Local Similarity 86.7%; Pred. No. 6.5e+03;  
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 653 GAGAACCTGGGGCTC 667  
Db ||||| |||||  
6 GAGCACCCAGGGGCTC 20  
  
RESULT 5574  
AAT60650  
ID AAT60650 standard; DNA; 20 BP.  
XX  
AC AAT60650;  
XX  
DT 26-JUN-1997 (first entry)  
XX  
DE Antisense oligonucleotide #4 targetting nuclear proto-oncogene.  
XX  
KW Nuclear proto-oncogene; antisense oligonucleotide; inhibitor; collagen;  
KW extracellular matrix protein; haemodialysis; vascular graft; therapy;  
KW human tissue; sclerotic disorder; scar formation; vascular restenosis;  
KW fibrous connective tissue; atherosclerosis; post-surgical scarring;  
KW atherogenesis; kaloid disease; liver cirrhosis; rheumatological disorder;  
KW reconstructive surgery; ss.  
XX  
OS Synthetic.  
XX

PN WO9632966-A1.  
XX  
PD 24-OCT-1996.  
XX  
PF 19-APR-1996; 96WO-US005334.  
XX  
PR 19-APR-1995; 95US-00424991.  
XX  
PA (UYJE-) UNIV JEFFERSON THOMAS.  
XX  
PI Zalewski A, Shi Y;  
XX WPI; 1996-485560/48.  
DR  
XX  
PT Use of anti:sense cpds. to inhibit inappropriate synthesis - in tissue of  
PT extracellular matrix proteins, particularly collagen, esp. type I and  
PT type III.  
XX  
PS Disclosure; Page 64; 103pp; English.  
XX  
CC AAT60643, and AAT60647-T60653 represent antisense oligonucleotides  
CC specific for a nuclear proto-oncogene. These sequences are used in a  
CC composition of the invention, for inhibiting synthesis of extracellular  
CC matrix proteins. These sequences can also be used in the methods of the  
CC invention. The methods of the invention all involve using at least one of  
CC these sequences to prevent or treat a disease. The methods are for  
CC preventing failure of a haemodialysis access site (HAS) of a  
CC haemodialysis patient, for treating vascular grafts and/or in an ex vivo  
CC method for preventing failure of vascular grafts made with veins, and for  
CC inhibiting the synthesis of extracellular matrix proteins in a human  
CC tissue. Other methods of the invention are for treating sclerotic  
CC disorders, for reducing scar formation in a human tissue, and for  
CC inhibiting formation of unwanted fibrous connective tissue in a human.  
CC The methods relate to the use of certain antisense compounds to inhibit  
CC the inappropriate synthesis in a tissue of extracellular matrix proteins,  
CC particularly collagen, and more particularly collagens type I and III.  
CC The inappropriate and/or excessive synthesis of extracellular matrix  
CC proteins can result in medical conditions, including sclerotic disorders,  
CC vascular restenosis, or atherosclerosis, atherogenesis, kaloid disease,  
CC liver cirrhosis, rheumatological disorders of the joints, loss of  
CC arteriovenous and venous graft potency, post-surgical scarring,  
CC reconstructive surgery and the like, generally found in human subjects  
XX  
SQ Sequence 20 BP; 4 A; 6 C; 7 G; 3 T; 0 U; 0 Other;  
  
Query Match 0.4%; Score 11.8; DB 1; Length 20;  
Best Local Similarity 86.7%; Pred. No. 6.5e+03;  
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 653 GAGAACCTGGGGCTC 667  
Db ||||| |||||  
6 GAGCACCCAGGGGCTC 20  
  
RESULT 5575  
AAT95343  
ID AAT95343 standard; DNA; 20 BP.  
XX  
AC AAT95343;  
XX  
DT 20-APR-1998 (first entry)  
XX  
DE Treatment of human melanoma using c-myc oligonucleotide 10.  
XX  
KW Melanoma; c-myc oligonucleotide; c-myc mRNA; cis-platin; inhibition;  
KW metastasis; treatment; proliferation; human; tumour; ss.  
XX  
OS Synthetic.  
OS Homo sapiens.  
XX  
PN WO9736005-A1.  
XX  
PD 02-OCT-1997.



CC occurrence of, and for treating neurodegenerative disease, particularly  
CC Alzheimer's disease. The present sequence is a PCR primer, which was used  
CC in the method of the invention.

XX  
SQ Sequence 20 BP; 1 A; 2 C; 3 G; 14 T; 0 U; 0 Other;

Query Match 0.4%; Score 11.8; DB 1; Length 20;  
Best Local Similarity 86.7%; Pred. No. 6.5e+03;  
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2173 TTTTCTTTTCTTTTCTA 2187  
||||| ||||| ||  
Db 2 TTTTCTTTTCTTTTCTA 16

RESULT 5571  
AAQ70719  
ID AAQ70719 standard; DNA; 20 BP.

XX

AC AAQ70719;

XX 25-MAR-2003 (revised)

DT 22-FEB-1995 (first entry)

XX C-myc gene antisense oligo.

XX C-myc; oncogene; smooth muscle; antisense; phosphorothioate;

KW oligonucleotide; restenosis; ss.

XX Synthetic.

XX WO9415646-A1.

XX 21-JUL-1994.

XX 07-JAN-1994; 94WO-US000265.

XX 07-JAN-1993; 93US-00004799.

XX (UYJE-) UNIV JEFFERSON THOMAS.

XX Zalewski A, Shi Y;

XX WPI; 1994-248909/30.

XX Use of antisense oligonucleotides specific for c-myc - for modulating the

XX proliferation of smooth muscle cells, partic. for treating or preventing  
XX restenosis.  
XX Example 12; Page 29; 52pp; English.  
XX An oligonucleotide (AAQ70710) antisense to a segment of human c-myc mRNA  
XX beginning with a translational initiation codon reduced neointima  
XX formation in the coronary vasculature in a pig restenosis model. Activity  
XX was compared to that of antisense oligos (AAQ70715-21) that targeted  
XX other regions of c-myc mRNA. The oligo given in AAQ70719 targeted  
XX nucleotides 1264-1283 of the 5' non-coding region, and provided a similar  
XX degree of growth inhibition as the AAQ70710 oligo. (Updated on 25-MAR-  
XX 2003 to correct PN field.)

XX Sequence 20 BP; 4 A; 6 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 11.8; DB 1; Length 20;  
Best Local Similarity 86.7%; Pred. No. 6.5e+03;  
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 653 GAGAACCTGGGGCTC 667  
||||| ||||| |||||  
Db 6 GAGCACCAGGGGCTC 20

RESULT 5572  
AAQ87813

ID AAQ87813 standard; DNA; 20 BP.  
XX  
AC AAQ87813;

XX 07-DEC-1995 (first entry)

XX Antisense oligomer to human c-myc DNA (positions 1264-2383).

DE c-myc; c-myb; procollagen; antisense oligonucleotide; restenosis;  
XX sclerosis; collagen; atherosclerosis; liver cirrhosis; acne; ss.

XX Synthetic.

XX WO9510305-A1.

XX 20-APR-1995.

XX 17-OCT-1994; 94WO-US011853.

XX 15-OCT-1993; 93US-00138637.

XX (UYJE-) UNIV JEFFERSON THOMAS.

XX Zalewski A, Shi Y;

XX WPI; 1995-161579/21.

XX Inhibiting synthesis of extracellular matrix proteins - using anti-sense  
XX oligo-nucleotide(s) directed against proto-oncogene(s), for treating  
XX sclerotic disease, restenosis, inhibiting scar formation, etc.

XX Claim 34; Page 24; 76pp; English.

XX This sequence, like sequences AAQ87809-12, is an antisense  
XX oligonucleotide to Human c-myc DNA. The sequence AAQ87814 is an antisense  
XX oligonucleotide to Human c-myc DNA. These oligonucleotides inhibit  
XX secretion of procollagens I and III, in intima, media, adventitia or  
XX connective tissue. This inhibition only occurs when more than one of  
XX these sequences is present. The sequences can be used to treat sclerotic  
XX disorders, to inhibit collagen synthesis in restenosis, or reduction of  
XX scar tissue. Other applications are in treatment of atherosclerosis,  
XX liver cirrhosis, acne, etc

XX Sequence 20 BP; 4 A; 6 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 11.8; DB 1; Length 20;  
Best Local Similarity 86.7%; Pred. No. 6.5e+03;  
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 653 GAGAACCTGGGGCTC 667  
||||| ||||| |||||  
Db 6 GAGCACCAGGGGCTC 20

RESULT 5573

AAQ60649

ID AAT60649 standard; DNA; 20 BP.

XX AAT60649;

XX 26-JUN-1997 (first entry)

XX Antisense oligonucleotide #3 targeting nuclear proto-oncogene.

XX Nuclear proto-oncogene; antisense oligonucleotide; inhibitor; collagen;  
XX extracellular matrix protein; haemodialysis; vascular graft; therapy;  
XX human tissue; sclerotic disorder; scar formation; vascular restenosis;  
XX fibrous connective tissue; atherosclerosis; post-surgical scarring;  
XX atherogenesis; kaloid disease; liver cirrhosis; rheumatical disorder;  
XX reconstructive surgery; ss.

XX Synthetic.

XX

PT hybridize with target.  
XX  
PS Example 2; SEQ ID NO 555; 423pp; English.  
XX  
CC The invention relates to a method of predicting the potential of  
CC oligonucleotides to hybridize to target nucleotide sequences. The method  
CC is useful for predicting the potential of an oligonucleotide to hybridize  
CC to a target nucleotide sequence, e.g. RNA or DNA or a sequence that  
CC contains chemically modified nucleotides. The method is also useful for  
CC predicting the potential of the oligonucleotides to hybridize to a  
CC complementary target nucleotide sequence. The method is useful to predict  
CC efficient hybridisation oligonucleotides for each of multiple target  
CC sequences therefore very large arrays may be constructed and tested with  
CC minimum synthesis of oligonucleotides. The present sequence represents a  
CC HIV PRT antisense derived probe.  
XX  
SQ Sequence 20 BP; 3 A; 3 C; 1 G; 13 T; 0 U; 0 Other;  
  
Query Match 0.4%; Score 11.8; DB 1; Length 20;  
Best Local Similarity 86.7%; Pred. No. 6.5e+03;  
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 2783 TTGAAAAAAGAAAAA 2797  
Db 18 TTAAAAAAGAAAAA 4  
  
RESULT 5569  
ADD81481/c  
ID ADD81481 standard; DNA; 20 BP.  
XX  
AC ADD81481;  
XX  
DT 29-JAN-2004 (first entry)  
XX  
DE HIV PRT antisense derived probe #410.  
XX  
KW ss; oligonucleotide hybridisation potential; efficient hybridisation;  
KW large array; minimum oligonucleotide synthesis; probe.  
XX  
OS Human immunodeficiency virus.  
XX  
PN US2003054346-A1.  
XX  
PD 20-MAR-2003.  
XX  
PF 15-FEB-2001; 2001US-00784674.  
XX  
PR 10-FEB-1998; 98US-00021701.  
XX  
PA (SHAN/) SHANNON K W.  
PA (WOLB/) WOLBER P K.  
PA (DELE/) DELENSTARR G C.  
PA (WEBB/) WEBB P G.  
PA (KINC/) KINCAID R H.  
XX  
PI Shannon KW, Wolber PK, Delenstarr GC, Webb PG, Kincaid RH;  
XX WPI; 2003-743746/70.  
DR  
XX  
PT Predicting potential of oligonucleotides to hybridize to target  
PT nucleotide sequence comprises determining and evaluating for each  
PT oligonucleotide a parameter predictive of the oligonucleotides ability to  
PT hybridize with target.  
XX  
PS Example 2; SEQ ID NO 554; 423pp; English.  
XX  
CC The invention relates to a method of predicting the potential of  
CC oligonucleotides to hybridize to target nucleotide sequences. The method  
CC is useful for predicting the potential of an oligonucleotide to hybridize  
CC to a target nucleotide sequence, e.g. RNA or DNA or a sequence that  
CC contains chemically modified nucleotides. The method is also useful for  
CC predicting the potential of the oligonucleotides to hybridize to a

CC complementary target nucleotide sequence. The method is useful to predict  
CC efficient hybridisation oligonucleotides for each of multiple target  
CC sequences therefore very large arrays may be constructed and tested with  
CC minimum synthesis of oligonucleotides. The present sequence represents a  
CC HIV PRT antisense derived probe.  
XX  
SQ Sequence 20 BP; 3 A; 3 C; 1 G; 13 T; 0 U; 0 Other;  
  
Query Match 0.4%; Score 11.8; DB 1; Length 20;  
Best Local Similarity 86.7%; Pred. No. 6.5e+03;  
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 2783 TTGAAAAAAGAAAAA 2797  
Db 19 TTAAAAAAGAAAAA 5  
  
RESULT 5570  
ADE43612  
ID ADE43612 standard; DNA; 20 BP.  
XX  
AC ADE43612;  
XX  
DT 29-JAN-2004 (first entry)  
XX  
DE Human KNSL1 sequencing primer, SEQ ID 217.  
XX  
KW Neurodegenerative disease; uPA; SNCG; IDE; KNSL1; LIPA; TNFRSF6;  
KW Alzheimer's disease; neuroprotective; nootropic; gene therapy;  
KW Chromosome 10; PCR; primer; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO2003054143-A2.  
XX  
PD 03-JUL-2003.  
XX  
PF 25-OCT-2002; 2002WO-US034679.  
XX  
PR 25-OCT-2001; 2001US-0339525P.  
PR 08-NOV-2001; 2001US-0336929P.  
PR 08-NOV-2001; 2001US-0338010P.  
PR 09-NOV-2001; 2001US-0338363P.  
PR 04-DEC-2001; 2001US-0337052P.  
PR 28-MAR-2002; 2002US-0368919P.  
XX  
PA (NEUR-) NEUROGENETICS INC.  
PA (GEO ) GEN HOSPITAL CORP.  
XX  
PI Becker KD, Velicelebi G, Elliott KJ, Wang X, Tanzi RE, Bertram L;  
PI Saunders AJ, Mullin KM, Sampson AJ, Blacker DL;  
XX WPI; 2003-559131/52.  
DR  
XX  
PT Determining a predisposition for or the occurrence of neurodegenerative  
PT disease, e.g. Alzheimer's disease by detecting in a target nucleic acid  
PT the presence or absence of an allelic variant of one or more polymorphic  
PT regions.  
XX  
PS Example 3; Page 287; 848pp; English.  
XX  
CC The present invention relates to a method (M1) for determining a  
CC predisposition for or the occurrence of neurodegenerative disease in a  
CC subject. The method comprises detecting in a target nucleic acid obtained  
CC from the subject the presence or absence of an allelic variant of one or  
CC more polymorphic regions of one or more genes selected from uPA  
CC (Urokinase plasminogen activator), SNCG (gamma-synuclein), IDE (insulin-  
CC degrading enzyme), KNSL1 (Kinesin-like protein 1), LIPA (lysosomal acid  
CC lyase), and TNFRSF6 (Tumour Necrosis Factor Receptor-SF6), where the  
CC presence of at least one of the allelic variant of one or more  
CC polymorphic regions is indicative of a predisposition for or the  
CC occurrence of neurodegenerative disease. The genes are all located on  
CC chromosome 10. M1 is useful for determining a predisposition for or the

XX (EPIG-) EPIGENESIS PHARM INC.  
XX  
XX  
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
XX Miller S, Tang L, Shahabuddin S;  
XX  
XX WPI; 2003-229219/22.  
XX  
XX Pharmaceutical composition for treating ailments associated with impaired  
XX respiration, has oligo(s) antisense to specific gene(s) or its  
XX corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
XX ubiquinone.  
XX  
XX Disclosure; SEQ ID NO 3363; 872pp; English.  
XX  
XX The invention relates to a novel pharmaceutical composition, which has a  
XX first active agent comprising an oligonucleotide antisense to the  
XX initiation codon, coding region, 5' or 3' end genomic flanking regions,  
XX 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
XX junctions of genes encoding a polypeptide associated with lung and/or  
XX nasal airway dysfunction and a second active agent comprising an  
XX antiinflammatory steroid and ubiquinone. A composition of the invention  
XX has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
XX immunosuppressive, and cytostatic activity. The composition may have a  
XX use in antisense gene therapy. The composition is useful for treating or  
XX preventing a respiratory, lung or malignant disease or condition, also  
XX for enhancing the prophylactic or therapeutic respiratory effect of an  
XX antiinflammatory steroid in a subject, for reducing or depleting levels  
XX of, or reducing sensitivity to adenosine, reducing levels of adenosine  
XX receptor, producing bronchodilation, increasing levels of ubiquinone or  
XX lung surfactant in a subject's tissue, or treating bronchoconstriction,  
XX lung inflammation, lung allergies, or a respiratory disease or condition.  
XX Note: The sequence data for this patent is not represented in the printed  
XX specification, but was obtained in electronic format directly from WIPO  
XX at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
XX Sequence 20 BP; 11 A; 0 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.4%; Score 11.8; DB 1; Length 20;  
Best Local Similarity 86.7%; Pred. No. 6.5e+03;  
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1915 CAATACCTTTT 1929  
Db 18 CAATACCTTTT 4

RESULT 5567  
ADD81483/C  
ID ADD81483 standard; DNA; 20 BP.  
XX  
XX ADD81483;  
XX  
XX 29-JAN-2004 (first entry)  
XX  
XX HIV PRT antisense derived probe #412.

XX ss; oligonucleotide hybridisation potential; efficient hybridisation;  
XX large array; minimum oligonucleotide synthesis; probe.  
XX Human immunodeficiency virus.  
XX  
XX US2003054346-A1.  
XX  
XX 20-MAR-2003.  
XX  
XX 15-FEB-2001; 2001US-00784674.  
XX  
XX 10-FEB-1998; 98US-00021701.  
XX

XX (SHAN/) SHANNON K W.  
XX (WOLB/) WOLBER P K.  
XX (DELE/) DELENSTARR G C.  
XX  
XX  
XX 15-FEB-2001; 2001US-00784674.  
XX  
XX 10-FEB-1998; 98US-00021701.  
XX  
XX  
XX (SHAN/) SHANNON K W.  
XX (WOLB/) WOLBER P K.  
XX (DELE/) DELENSTARR G C.  
XX

PA (WEBB/) WEBB P G.  
PA (KINC/) KINCAID R H.  
XX  
XX Shannon KW, Wolber PK, Delenstarr GC, Webb PG, Kincaid RH;  
XX WPI; 2003-743746/70.  
XX  
XX Predicting potential of oligonucleotides to hybridize to target  
XX nucleotide sequence comprises determining and evaluating for each  
XX oligonucleotide a parameter predictive of the oligonucleotides ability to  
XX hybridize with target.  
XX  
XX Example 2; SEQ ID NO 556; 423pp; English.

XX The invention relates to a method of predicting the potential of  
XX oligonucleotides to hybridise to target nucleotide sequences. The method  
XX is useful for predicting the potential of an oligonucleotide to hybridise  
XX to a target nucleotide sequence, e.g. RNA or DNA or a sequence that  
XX contains chemically modified nucleotides. The method is also useful for  
XX predicting the potential of the oligonucleotides to hybridise to a  
XX complementary target nucleotide sequence. The method is useful to predict  
XX efficient hybridisation oligonucleotides for each of multiple target  
XX sequences therefore very large arrays may be constructed and tested with  
XX minimum synthesis of oligonucleotides. The present sequence represents a  
XX HIV PRT antisense derived probe.

XX Sequence 20 BP; 3 A; 4 C; 1 G; 12 T; 0 U; 0 Other;  
XX  
XX Query Match 0.4%; Score 11.8; DB 1; Length 20;  
XX Best Local Similarity 86.7%; Pred. No. 6.5e+03;  
XX Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2783 TTGAAAAA 2797  
Db 17 TTAAAAAGAAAAA 3

RESULT 5568  
ADD81482/C  
ID ADD81482 standard; DNA; 20 BP.  
XX  
XX ADD81482;  
XX  
XX 29-JAN-2004 (first entry)  
XX  
XX HIV PRT antisense derived probe #411.

XX ss; oligonucleotide hybridisation potential; efficient hybridisation;  
XX large array; minimum oligonucleotide synthesis; probe.  
XX Human immunodeficiency virus.  
XX  
XX US2003054346-A1.  
XX  
XX 20-MAR-2003.  
XX  
XX 15-FEB-2001; 2001US-00784674.  
XX  
XX 10-FEB-1998; 98US-00021701.  
XX

XX (SHAN/) SHANNON K W.  
XX (WOLB/) WOLBER P K.  
XX (DELE/) DELENSTARR G C.  
XX (WEBB/) WEBB P G.  
XX (KINC/) KINCAID R H.  
XX  
XX Shannon KW, Wolber PK, Delenstarr GC, Webb PG, Kincaid RH;  
XX WPI; 2003-743746/70.  
XX

XX Predicting potential of oligonucleotides to hybridize to target  
XX nucleotide sequence comprises determining and evaluating for each  
XX oligonucleotide a parameter predictive of the oligonucleotides ability to  
XX hybridize with target.  
XX  
XX Example 2; SEQ ID NO 556; 423pp; English.

RESULT 5564  
AAH80591/c  
ID AAH80591 standard; cDNA; 20 BP.  
XX  
AC AAH80591;  
XX  
DT 11-SEP-2003 (revised)  
DT 19-SEP-2001 (first entry)  
XX  
DE Oligonucleotide hybridisation potential related cDNA SEQ ID NO: 555.  
XX  
KW Nucleic acid hybridisation; probe; primer; human; rabbit; HIV-1;  
KW disease diagnosis; ss.  
XX  
OS Human immunodeficiency virus 1.  
XX  
PN US6251588-B1.  
XX  
PD 26-JUN-2001.  
XX  
PF 10-FEB-1998; 98US-00021701.  
XX  
PR 10-FEB-1998; 98US-00021701.  
XX  
PA (AGIL-) AGILENT TECHNOLOGIES INC.  
XX  
PI Shannon KW, Wolber PK, Delenstarr GC, Webb PG, Kincaid RH;  
XX WPI; 2001-424456/45.  
XX  
PT Predicting the potential of an oligonucleotide to hybridize to a target  
PT nucleotide sequence, useful for evaluating oligonucleotide probe  
PT sequences, by identifying a oligonucleotides based on the evaluation of  
PT parameters.  
XX  
PS Example 2; Col 65; 342pp; English.  
XX  
CC The present invention describes a method for predicting the potential of  
CC an oligonucleotide to hybridise to a (complementary) target nucleotide  
CC sequence, involving identifying a subset of oligonucleotides within the  
CC predetermined number of unique oligonucleotides based on the evaluation  
CC of the parameter. Oligonucleotides in the subset are identified that are  
CC clustered along a region of the nucleotide sequence that is hybridisable  
CC to the target nucleotide sequence. This is useful for evaluating  
CC oligonucleotide probe sequences. The present sequence is an  
CC oligonucleotide described in the exemplification of the invention.  
CC (Updated on 11-SEP-2003 to standardise OS field)  
XX  
SQ Sequence 20 BP; 3 A; 3 C; 1 G; 13 T; 0 U; 0 Other;  
XX  
XX Example 2; Col 65; 342pp; English.  
XX  
CC The present invention describes a method for predicting the potential of  
CC an oligonucleotide to hybridise to a (complementary) target nucleotide  
CC sequence, involving identifying a subset of oligonucleotides within the  
CC predetermined number of unique oligonucleotides based on the evaluation  
CC of the parameter. Oligonucleotides in the subset are identified that are  
CC clustered along a region of the nucleotide sequence that is hybridisable  
CC to the target nucleotide sequence. This is useful for evaluating  
CC oligonucleotide probe sequences. The present sequence is an  
CC oligonucleotide described in the exemplification of the invention.  
CC (Updated on 11-SEP-2003 to standardise OS field)  
XX  
SQ Sequence 20 BP; 3 A; 3 C; 1 G; 13 T; 0 U; 0 Other;  
XX  
XX Query Match 0.4%; Score 11.8; DB 1; Length 20;  
XX Best Local Similarity 86.7%; Pred. No. 6.5e+03;  
XX Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
XX  
QY 2783 TTGAAAAAAGAAAAA 2797  
Db 18 TTAAAAAGAAAAA 4  
XX  
RESULT 5565  
AAH80590/c  
ID AAH80590 standard; cDNA; 20 BP.  
XX  
AC AAH80590;  
XX  
DT 11-SEP-2003 (revised)  
DT 19-SEP-2001 (first entry)  
XX  
DE Oligonucleotide hybridisation potential related cDNA SEQ ID NO: 554.  
XX  
KW Nucleic acid hybridisation; probe; primer; human; rabbit; HIV-1;

disease diagnosis; ss.  
XX  
OS Human immunodeficiency virus 1.  
XX  
PN US6251588-B1.  
XX  
PD 26-JUN-2001.  
XX  
PF 10-FEB-1998; 98US-00021701.  
XX  
PR 10-FEB-1998; 98US-00021701.  
XX  
PA (AGIL-) AGILENT TECHNOLOGIES INC.  
XX  
PI Shannon KW, Wolber PK, Delenstarr GC, Webb PG, Kincaid RH;  
XX WPI; 2001-424456/45.  
XX  
PT Predicting the potential of an oligonucleotide to hybridize to a target  
PT nucleotide sequence, useful for evaluating oligonucleotide probe  
PT sequences, by identifying a oligonucleotides based on the evaluation of  
PT parameters.  
XX  
PS Example 2; Col 65; 342pp; English.  
XX  
CC The present invention describes a method for predicting the potential of  
CC an oligonucleotide to hybridise to a (complementary) target nucleotide  
CC sequence, involving identifying a subset of oligonucleotides within the  
CC predetermined number of unique oligonucleotides based on the evaluation  
CC of the parameter. Oligonucleotides in the subset are identified that are  
CC clustered along a region of the nucleotide sequence that is hybridisable  
CC to the target nucleotide sequence. This is useful for evaluating  
CC oligonucleotide probe sequences. The present sequence is an  
CC oligonucleotide described in the exemplification of the invention.  
CC (Updated on 11-SEP-2003 to standardise OS field)  
XX  
SQ Sequence 20 BP; 3 A; 3 C; 1 G; 13 T; 0 U; 0 Other;  
XX  
XX Query Match 0.4%; Score 11.8; DB 1; Length 20;  
XX Best Local Similarity 86.7%; Pred. No. 6.5e+03;  
XX Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
XX  
QY 2783 TTGAAAAAAGAAAAA 2797  
Db 19 TTAAAAAGAAAAA 5  
XX  
RESULT 5566  
ABZ88121/c  
ID ABZ88121 standard; DNA; 20 BP.  
XX  
AC ABZ88121;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human oligonucleotide sequence.  
XX  
KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
XX  
OS Homo sapiens.  
XX  
PN WO200285308-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013135.  
XX  
PR 24-APR-2001; 2001US-0286137P.





DE Human c-fos transcript target sequence/siNA upper strand, SEQ ID NO:111.  
XX RNA interference; short interfering nucleic acid; siNA;  
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
KW drug screening; diagnosis; therapeutic target identification;  
KW pharmacogenomics; gene function analysis; gene mapping;  
KW central nervous system disorder; Alzheimer's disease;  
KW Parkinson's disease; Huntington's disease; epilepsy; dementia;  
KW amyotrophic lateral sclerosis; cancer; proliferative disease; restenosis;  
KW polycystic kidney disease; inflammatory disease; allergic disease;  
KW viral infection; HIV infection; autoimmune disease; transplant rejection;  
KW vasotropic; neutropic; antiparkinsonian; neuroprotective; cytostatic;  
KW antiinflammatory; antiallergic; virucide; anti-HIV; immunosuppressive;  
KW anticonvulsant; nephrotropic; human; c-fos; target sequence; ss.  
XX  
OS Homo sapiens.  
XX  
XX WO2003070914-A2.  
PN  
XX  
XX 28-AUG-2003.  
PD  
XX  
XX 20-FEB-2003; 2003WO-US005162.  
PF  
XX  
XX 20-FEB-2002; 2002US-0358580P.  
PR 11-MAR-2002; 2002US-0363124P.  
PR 06-JUN-2002; 2002US-0386782P.  
PR 29-AUG-2002; 2002US-0406784P.  
PR 05-SEP-2002; 2002US-0408378P.  
PR 09-SEP-2002; 2002US-0409293P.  
PR 15-JAN-2003; 2003US-0440129P.  
XX  
PA (SIRN-) SIRNA THERAPEUTICS INC.  
XX  
XX  
PI Mcswiggen J, Beigelman L;  
XX WPI; 2003-679877/64.  
DR  
XX  
XX New short interfering nucleic acid downregulates expression of the c-fos  
PT gene useful for treatment and diagnosis of diseases, e.g. cancer and  
PT inflammation.  
PT  
XX  
PS Example 3; SEQ ID NO 111; 145pp; English.  
XX  
CC The invention relates to short interfering nucleic acids (siNA) which  
CC downregulate expression of the human c-fos gene by RNA interference. The  
CC siNAs may or may not comprise ribonucleotides and may be double or single  
CC stranded. They further comprise sense and antisense regions, or  
CC alternatively are assembled from a sense oligonucleotide and an antisense  
CC oligonucleotide. Specifically, the siNAs include short interfering RNA  
CC (siRNA), double-stranded RNA, micro-RNA (miRNA) and short hairpin RNA  
CC (shRNA). The siNAs can be unmodified or chemically modified, can contain  
CC deoxyribonucleotides, and can be chemically synthesised, expressed from a  
CC vector or enzymatically synthesised. The invention also relates to kits  
CC for the in vitro or in vivo delivery of siNA; conjugates and/or complexes  
CC of siNA; and vectors that express siNA. The siNAs are used to modulate  
CC expression of the c-fos gene in cells, tissue explants or organisms  
CC (e.g., by ex vivo gene therapy), or in grafts and transplants for the  
CC treatment of a variety of conditions. They may be used for treating  
CC central nervous system lesions and injuries (e.g., Alzheimer's disease,  
CC Parkinson's disease, Huntington's disease, epilepsy, dementia or  
CC amyotrophic lateral sclerosis); various cancers; other proliferative  
CC diseases (e.g., restenosis and polycystic kidney disease); inflammatory  
CC and/or allergic diseases; viral infections (including HIV infection);  
CC autoimmune diseases; and transplant rejection. The siNAs are also useful  
CC for drug screening, diagnosis, therapeutic target identification and  
CC validation, genetic engineering, pharmacogenomics, studying gene  
CC function, and gene mapping (e.g., of single nucleotide polymorphisms).  
CC The present sequence represents the upper strand of a human c-fos-  
CC targeted double-stranded siNA, which is identical to the c-fos transcript  
CC target sequence.  
XX  
SQ Sequence 19 BP; 2 A; 3 C; 0 G; 0 T; 14 U; 0 Other;

Query Match 0.4%; Score 11.8; DB 1; Length 19;  
Best Local Similarity 86.7%; Pred. No. 6.4e+03;  
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1976 TTGAAAAAAGAAAA 1990  
Db 15 TAGAAAAAATAAAA 1  
RESULT 5561  
ADE65772  
ID ADE65772 standard; RNA; 19 BP.  
XX  
AC ADE65772;  
XX  
DT 29-JAN-2004 (first entry)  
XX  
DE Human c-fos siNA lower strand, SEQ ID NO:227.  
XX  
KW RNA interference; short interfering nucleic acid; siNA;  
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
KW drug screening; diagnosis; therapeutic target identification;  
KW pharmacogenomics; gene function analysis; gene mapping;  
KW central nervous system disorder; Alzheimer's disease;  
KW Parkinson's disease; Huntington's disease; epilepsy; dementia;  
KW amyotrophic lateral sclerosis; cancer; proliferative disease; restenosis;  
KW polycystic kidney disease; inflammatory disease; allergic disease;  
KW viral infection; HIV infection; autoimmune disease; transplant rejection;  
KW vasotropic; neutropic; antiparkinsonian; neuroprotective; cytostatic;  
KW antiinflammatory; antiallergic; virucide; anti-HIV; immunosuppressive;  
KW anticonvulsant; nephrotropic; human; c-fos; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO2003070914-A2.  
XX  
PD 28-AUG-2003.  
XX  
XX 20-FEB-2003; 2003WO-US005162.  
XX  
XX 20-FEB-2002; 2002US-0358580P.  
PR 11-MAR-2002; 2002US-0363124P.  
PR 06-JUN-2002; 2002US-0386782P.  
PR 29-AUG-2002; 2002US-0406784P.  
PR 05-SEP-2002; 2002US-0408378P.  
PR 09-SEP-2002; 2002US-0409293P.  
PR 15-JAN-2003; 2003US-0440129P.  
XX  
PA (SIRN-) SIRNA THERAPEUTICS INC.  
XX  
XX  
PI Mcswiggen J, Beigelman L;  
XX WPI; 2003-679877/64.  
DR  
XX  
XX New short interfering nucleic acid downregulates expression of the c-fos  
PT gene useful for treatment and diagnosis of diseases, e.g. cancer and  
PT inflammation.  
PT  
XX  
PS Example 3; SEQ ID NO 227; 145pp; English.  
XX  
CC The invention relates to short interfering nucleic acids (siNA) which  
CC downregulate expression of the human c-fos gene by RNA interference. The  
CC siNAs may or may not comprise ribonucleotides and may be double or single  
CC stranded. They further comprise sense and antisense regions, or  
CC alternatively are assembled from a sense oligonucleotide and an antisense  
CC oligonucleotide. Specifically, the siNAs include short interfering RNA  
CC (siRNA), double-stranded RNA, micro-RNA (miRNA) and short hairpin RNA  
CC (shRNA). The siNAs can be unmodified or chemically modified, can contain  
CC deoxyribonucleotides, and can be chemically synthesised, expressed from a  
CC vector or enzymatically synthesised. The invention also relates to kits  
CC for the in vitro or in vivo delivery of siNA; conjugates and/or complexes  
CC of siNA; and vectors that express siNA. The siNAs are used to modulate  
CC expression of the c-fos gene in cells, tissue explants or organisms  
CC (e.g., by ex vivo gene therapy), or in grafts and transplants for the  
CC treatment of a variety of conditions. They may be used for treating  
CC central nervous system lesions and injuries (e.g., Alzheimer's disease,  
CC Parkinson's disease, Huntington's disease, epilepsy, dementia or  
CC amyotrophic lateral sclerosis); various cancers; other proliferative  
CC diseases (e.g., restenosis and polycystic kidney disease); inflammatory  
CC and/or allergic diseases; viral infections (including HIV infection);  
CC autoimmune diseases; and transplant rejection. The siNAs are also useful  
CC for drug screening, diagnosis, therapeutic target identification and  
CC validation, genetic engineering, pharmacogenomics, studying gene  
CC function, and gene mapping (e.g., of single nucleotide polymorphisms).  
CC The present sequence represents the upper strand of a human c-fos-  
CC targeted double-stranded siNA, which is identical to the c-fos transcript  
CC target sequence.  
XX  
SQ Sequence 19 BP; 2 A; 3 C; 0 G; 0 T; 14 U; 0 Other;

CC The invention relates to a nucleic acid molecule which down regulates  
CC expression of a CD20 gene and a nucleic acid molecule which down  
CC regulates expression of a neurite growth inhibitor gene (NOGO). The  
CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a  
CC DNzyme) an inozyme (an endolytic nucleic acid cleaving a NYN motif) pr  
CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) pr  
CC an amberzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA  
CC with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA  
CC of CD20 in the presence of a divalent cation that is preferably Mg<sup>2+</sup>.  
CC Furthermore, it may be contacted with a cell to reduce CD20 activity of  
CC the cell and treat a patient having a condition associated with the level  
CC of CD20. The treatment may further comprise the use of one or more  
CC therapies. In particular, the CD20 targetting nucleic acid may be used to  
CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-  
CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic  
CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell  
CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,  
CC targeting nucleic acid is used to cleave RNA of the NOGO gene in the  
CC presence of a divalent cation that is preferably Mg<sup>2+</sup>. Furthermore, the  
CC nucleic acid may be contacted with a cell to reduce NOGO activity of the  
CC cell and treat a patient having a condition associated with the level of  
CC NOGO. The treatment may further comprise the use of one or more  
CC therapies. In particular, the NOGO-targetting nucleic acid may be used to  
CC treat central nervous system (CNS) injury and cerebrovascular accident  
CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),  
CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),  
CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob  
CC disease, muscular dystrophy, and/or other neurodegenerative disease  
CC states which respond to the modulation of NOGO expression. The present  
CC sequence is an inozyme of the invention  
XX  
SQ Sequence 17 BP; 1 A; 13 C; 2 G; 0 T; 1 U; 0 Other;

Query Match 0.4%; Score 11.8; DB 1; Length 17;  
Best Local Similarity 86.7%; Pred. No. 5.9e+03;  
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 288 GCCCGCGGCCACCCC 302  
Db 2 GCCCGCGGCCACCCC 16

RESULT 5559  
ABK00049  
ID ABK00049 standard; RNA; 17 BP.  
XX  
AC ABK00049;  
XX  
12-MAR-2002 (first entry)  
XX  
DE Human NOGO Hammerhead Ribozyme #49.  
XX  
KW Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;  
KW cerebroprotective; nootropic; neuroprotective; antiparkinsonian;  
KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;  
KW DNzyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia;  
KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;  
KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;  
KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;  
KW inflammatory arthropathy; central nervous system injury;  
KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;  
KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;  
KW Parkinson's disease; ataxia; Huntington's disease;  
KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.  
XX  
OS Homo sapiens.  
OS Synthetic.  
XX  
PN WO200159103-A2.  
XX  
16-AUG-2001.  
PD  
XX

PF  
XX  
PR 11-FEB-2000; 2000US-0181797P.  
PR 28-FEB-2000; 2000US-0185516P.  
PR 06-MAR-2000; 2000US-0187128P.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
PA (BLAT/) BLATT L.  
PA (MCSW/) MCSWIGGEN J.  
PA (CHOW/) CHOWRIRA B M.  
XX  
PI Blatt L, Mcswiggen J, Chowrira BM;  
XX WPI; 2001-607195/69.  
DR  
XX  
PT Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense  
PT constructs, which down regulate expression of a CD20 gene or neurite  
PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and  
PT central nervous system injury.  
XX  
PS Claim 88; Page 66; 200pp; English.  
XX  
CC The invention relates to a nucleic acid molecule which down regulates  
CC expression of a CD20 gene and a nucleic acid molecule which down  
CC regulates expression of a neurite growth inhibitor gene (NOGO). The  
CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a  
CC DNzyme) an inozyme (an endolytic nucleic acid cleaving a NYN motif) pr  
CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) pr  
CC an amberzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA  
CC with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA  
CC of CD20 in the presence of a divalent cation that is preferably Mg<sup>2+</sup>.  
CC Furthermore, it may be contacted with a cell to reduce CD20 activity of  
CC the cell and treat a patient having a condition associated with the level  
CC of CD20. The treatment may further comprise the use of one or more  
CC therapies. In particular, the CD20 targetting nucleic acid may be used to  
CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-  
CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic  
CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell  
CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,  
CC immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-  
CC targetting nucleic acid is used to cleave RNA of the NOGO gene in the  
CC presence of a divalent cation that is preferably Mg<sup>2+</sup>. Furthermore, the  
CC nucleic acid may be contacted with a cell to reduce NOGO activity of the  
CC cell and treat a patient having a condition associated with the level of  
CC NOGO. The treatment may further comprise the use of one or more  
CC therapies. In particular, the NOGO-targetting nucleic acid may be used to  
CC treat central nervous system (CNS) injury and cerebrovascular accident  
CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),  
CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),  
CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob  
CC disease, muscular dystrophy, and/or other neurodegenerative disease  
CC states which respond to the modulation of NOGO expression. The present  
CC sequence is an inozyme of the invention  
XX  
SQ Sequence 17 BP; 1 A; 12 C; 3 G; 0 T; 1 U; 0 Other;

Query Match 0.4%; Score 11.8; DB 1; Length 17;  
Best Local Similarity 86.7%; Pred. No. 5.9e+03;  
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 288 GCCCGCGGCCACCCC 302  
Db 1 GCCCGCGGCCACCCC 15

RESULT 5560  
ADE65656/c  
ID ADE65656 standard; RNA; 19 BP.  
XX  
AC ADE65656;  
XX  
29-JAN-2004 (first entry)  
XX



ABK00932  
ID ABK00932 standard; RNA; 17 BP.  
XX  
AC ABK00932;  
XX  
DT 12-MAR-2002 (first entry)  
XX  
DE Human NOGO Inozyme #202.  
XX  
KW Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;  
KW cerebroprotective; nootropic; neuroprotective; antiparkinsonian;  
KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;  
KW DNazyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia;  
KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;  
KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;  
KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;  
KW inflammatory arthropathy; central nervous system injury;  
KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;  
KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;  
KW Parkinson's disease; ataxia; Huntington's disease;  
KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.  
XX  
OS Homo sapiens.  
OS Synthetic.  
XX  
PN WO200159103-A2.  
XX  
PD 16-AUG-2001.  
XX  
PF 09-FEB-2001; 2001WO-US004273.  
XX  
PR 11-FEB-2000; 2000US-0181797P.  
PR 28-FEB-2000; 2000US-0185516P.  
PR 06-MAR-2000; 2000US-0187128P.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
PA (BLAT/) BLATT L.  
PA (MCSW/) MCSWIGGEN J.  
PA (CHOW/) CHOWRIRA B M.  
XX  
PI Blatt L, Mcswiggen J, Chowrira BM;  
XX WPI; 2001-607195/69.  
DR  
XX  
PT Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense  
PT constructs, which down regulate expression of a CD20 gene or neurite  
PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and  
PT central nervous system injury.  
XX  
PS Claim 88; Page 81; 200pp; English.  
XX  
CC The invention relates to a nucleic acid molecule which down regulates  
CC expression of a CD20 gene and a nucleic acid molecule which down  
CC regulates expression of a neurite growth inhibitor gene (NOGO). The  
CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a  
CC DNazyme) an Inozyme (an endolytic nucleic acid cleaving a an RNA molecule  
CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) pr  
CC an amberzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA  
CC with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA  
CC of CD20 in the presence of a divalent cation that is preferably Mg<sup>2+</sup>.  
CC Furthermore, it may be contacted with a cell to reduce CD20 activity of  
CC the cell and treat a patient having a condition associated with the level  
CC of CD20. The treatment may further comprise the use of one or more  
CC therapies. In particular, the CD20 targetting nucleic acid may be used to  
CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-  
CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic  
CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell  
CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,  
CC immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-  
CC targetting nucleic acid is used to cleave RNA of the NOGO gene in the  
CC presence of a divalent cation that is preferably Mg<sup>2+</sup>. Furthermore, the  
CC nucleic acid may be contacted with a cell to reduce NOGO activity of the  
CC cell and treat a patient having a condition associated with the level of

CC NOGO. The treatment may further comprise the use of one or more  
CC therapies. In particular, the NOGO-targetting nucleic acid may be used to  
CC treat central nervous system (CNS) injury and cerebrovascular accident  
CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),  
CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),  
CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob  
CC disease, muscular dystrophy, and/or other neurodegenerative disease  
CC states which respond to the modulation of NOGO expression. The present  
CC sequence is an inozyme of the invention  
XX  
SQ Sequence 17 BP; 1 A; 13 C; 2 G; 0 T; 1 U; 0 Other;  
Query Match 0.4%; Score 11.8; DB 1; Length 17;  
Best Local Similarity 86.7%; Pred. No. 5.9e+03;  
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 288 GCCCGCGGCCACCCC 302  
Db 3 GCCCCCCUCCACCCC 17  
RESULT 5558  
ABK00933  
ID ABK00933 standard; RNA; 17 BP.  
XX  
AC ABK00933;  
XX  
DT 12-MAR-2002 (first entry)  
XX  
DE Human NOGO Inozyme #203.  
XX  
KW Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;  
KW cerebroprotective; nootropic; neuroprotective; antiparkinsonian;  
KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;  
KW DNazyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia;  
KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;  
KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;  
KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;  
KW inflammatory arthropathy; central nervous system injury;  
KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;  
KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;  
KW Parkinson's disease; ataxia; Huntington's disease;  
KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.  
XX  
OS Homo sapiens.  
OS Synthetic.  
XX  
PN WO200159103-A2.  
XX  
PD 16-AUG-2001.  
XX  
PF 09-FEB-2001; 2001WO-US004273.  
XX  
PR 11-FEB-2000; 2000US-0181797P.  
PR 28-FEB-2000; 2000US-0185516P.  
PR 06-MAR-2000; 2000US-0187128P.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
PA (BLAT/) BLATT L.  
PA (MCSW/) MCSWIGGEN J.  
PA (CHOW/) CHOWRIRA B M.  
XX  
PI Blatt L, Mcswiggen J, Chowrira BM;  
XX WPI; 2001-607195/69.  
DR  
XX  
PT Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense  
PT constructs, which down regulate expression of a CD20 gene or neurite  
PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and  
PT central nervous system injury.  
XX  
PS Claim 88; Page 81; 200pp; English.  
XX



XX 12-MAR-2002 (first entry)  
XX Human CD20 Hammerhead ribozyme #90.  
DE Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;  
XX cerebroprotective; neurotropic; neuroprotective; antiparkinsonian;  
KW DNAzyme; inozyme; G-cleaver; growth inhibitor gene; NOGO; hammerhead ribozyme;  
KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;  
KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;  
KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;  
KW inflammatory arthropathy; central nervous system injury;  
KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;  
KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;  
KW Parkinson's disease; ataxia; Huntington's disease;  
KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.  
XX Homo sapiens.  
OS Synthetic.  
XX WO200159103-A2.  
XX 16-AUG-2001.  
XX 09-FEB-2001; 2001WO-US004273.  
XX 11-FEB-2000; 2000US-0181797P.  
PR 28-FEB-2000; 2000US-0185516P.  
PR 06-MAR-2000; 2000US-0187128P.  
XX (RIBO-) RIBOZYME PHARM INC.  
PA (BLAT/) BLATT L.  
PA (MCSW/) MCSWIGGEN J.  
PA (CHOW/) CHOWRIRA B M.  
XX Blatt L, Mcswiggen J, Chowrira BM;  
PI WPI; 2001-607195/69.  
XX Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense  
PT constructs, which down regulate expression of a CD20 gene or neurite  
PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and  
PT central nervous system injury.  
XX Claim 30; Page 141; 200pp; English.  
XX The invention relates to a nucleic acid molecule which down regulates  
CC expression of a CD20 gene and a nucleic acid molecule which down  
CC regulates expression of a neurite growth inhibitor gene (NOGO). The  
CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a  
CC DNAzyme) an inozyme (an endolytic nucleic acid cleaving an RNA molecule  
CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) pr  
CC an amberzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA  
CC with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA  
CC of CD20 in the presence of a divalent cation that is preferably Mg<sup>2+</sup>.  
CC Furthermore, it may be contacted with a cell to reduce CD20 activity of  
CC the cell and treat a patient having a condition associated with the level  
CC of CD20. The treatment may further comprise the use of one or more  
CC therapies. In particular, the CD20 targetting nucleic acid may be used to  
CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-  
CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic  
CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell  
CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,  
CC immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-  
CC targetting nucleic acid is used to cleave RNA of the NOGO gene in the  
CC presence of a divalent cation that is preferably Mg<sup>2+</sup>. Furthermore, the  
CC nucleic acid may be contacted with a cell to reduce NOGO activity of the  
CC cell and treat a patient having a condition associated with the level of  
CC NOGO. The treatment may further comprise the use of one or more  
CC therapies. In particular, the NOGO-targetting nucleic acid may be used to  
CC treat central nervous system (CNS) injury and cerebrovascular accident  
CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),

CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),  
CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob  
CC disease, muscular dystrophy, and/or other neurodegenerative disease  
CC states which respond to the modulation of NOGO expression. The present  
CC sequence is a hammerhead ribozyme of the invention  
XX  
SQ Sequence 17 BP; 7 A; 2 C; 0 G; 0 T; 8 U; 0 Other;  
Query Match 0.4%; Score 11.8; DB 1; Length 17;  
Best Local Similarity 33.3%; Pred. No. 5.9e+03;  
Matches 5; Conservative 8; Mismatches 2; Indels 0; Gaps 0;  
QY 2469 TTAATATTAACTTTT 2483  
Db 2 UUAUAUUAUAAAUUU 16  
RESULT 5556  
AAF03220/c  
ID AAF03220 standard; DNA; 17 BP.  
XX  
AC AAF03220;  
XX 16-FEB-2001 (first entry)  
XX Hammerhead ribozyme substrate #1515.  
XX Ribozyme; erythropoietin; granulocyte colony stimulating factor;  
KW interferon alpha; ss.  
XX Homo sapiens.  
XX WO2000061729-A2.  
XX 19-OCT-2000.  
XX 11-APR-2000; 2000WO-US009721.  
XX 12-APR-1999; 99US-0129390P.  
XX (RIBO-) RIBOZYME PHARM INC.  
XX Blatt L, Zwick M, Pavco P, Mcswiggen J;  
XX WPI; 2000-647423/62.  
XX Enzymatic and antisense nucleic acid inhibition of repressor genes,  
PT useful for producing e.g. granulocyte colony stimulating factor protein,  
PT interferon alpha and erythropoietin.  
XX Claim 37; Page 90; 164pp; English.  
XX The present invention relates to enzymatic and antisense nucleic acid  
CC molecules that act as inhibitors of the expression of repressor genes  
CC encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription  
CC factor gene, IRF-2 and/or the CAAT Displacement Protein (CDP).  
CC Inhibition of the repressors removes prevents inhibition (and  
CC consequently increases expression of) genes involved in the production of  
CC erythropoietin, granulocyte colony stimulating factor protein and  
CC interferon alpha  
XX Sequence 17 BP; 3 A; 1 C; 0 G; 13 T; 0 U; 0 Other;  
Query Match 0.4%; Score 11.8; DB 1; Length 17;  
Best Local Similarity 86.7%; Pred. No. 5.9e+03;  
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 2786 AAAAAAAAAAAAAA 2800  
Db 17 AAAAAAAAAAAATTAA 3  
RESULT 5557

OS Homo sapiens.  
XX WO9715662-A2.  
PN  
XX  
PD 01-MAY-1997.  
XX  
XX 25-OCT-1996; 96WO-US017480.  
PF  
XX 26-OCT-1995; 95US-0005974P.  
PR 11-JAN-1996; 96US-00584040.  
XX  
XX (RIBO-) RIBOZYME PHARM INC.  
PA (CHIR ) CHIRON CORP.  
XX  
PI Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;  
XX WPI; 1997-259017/23.  
DR  
XX  
XX Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA  
PT stability - useful for treating e.g. tumour angiogenesis, psoriasis,  
PT rheumatoid arthritis, etc., in a human patient.  
XX  
PS Claim 4; Page 68; 218pp; English.  
XX  
CC The present invention describes nucleic acid molecules which modulate the  
CC synthesis, expression and/or stability of a mRNA encoding 1 or more  
CC receptors of vascular endothelial growth factor (VEGF). A patient  
CC (preferably human) having a condition associated with the level of the  
CC fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing  
CC receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour  
CC angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be  
CC treated by administering the nucleic acid molecule or the expression  
CC vector to the patient. AAX67275 to AAX75752 represent specific examples  
CC of nucleic acid molecules from the present invention  
XX  
SQ Sequence 17 BP; 2 A; 2 C; 1 G; 0 T; 12 U; 0 Other;  
Query Match 0.4%; Score 11.8; DB 1; Length 17;  
Best Local Similarity 86.7%; Pred. No. 5.9e+03;  
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 2782 ATTGAAAAA 2796  
Db 16 AGTCAAAAAA 2  
RESULT 5554  
ABK02792  
ID ABK02792 standard; RNA; 17 BP.  
XX  
AC ABK02792;  
XX  
DT 12-MAR-2002 (first entry)  
XX  
DE Human CD20 Hammerhead ribozyme #91.  
XX  
KW Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;  
KW cerebroprotective; nootropic; neuroprotective; antiparkinsonian;  
KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;  
KW DNazyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia;  
KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;  
KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;  
KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;  
KW inflammatory arthropathy; central nervous system injury;  
KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;  
KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;  
KW Parkinson's disease; ataxia; Huntington's disease;  
KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.  
XX  
OS Homo sapiens.  
OS Synthetic.  
XX  
PN WO200159103-A2.

XX 16-AUG-2001.  
PD  
XX 03-FEB-2001; 2001WO-US004273.  
PF  
XX 11-FEB-2000; 2000US-0181797P.  
PR 28-FEB-2000; 2000US-0185516P.  
PR 06-MAR-2000; 2000US-0187128P.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
PA (BLAT/) BLATT L.  
PA (MCSW/) MCSWIGGEN J.  
PA (CHOW/) CHOWRIRA B M.  
XX  
PI Blatt L, Mcswiggen J, Chowrira BM;  
XX WPI; 2001-607195/69.  
DR  
XX  
XX Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense  
PT constructs, which down regulate expression of a CD20 gene or neurite  
PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and  
XX central nervous system injury.  
PS Claim 30; Page 141; 200pp; English.  
XX  
CC The invention relates to a nucleic acid molecule which down regulates  
CC expression of a CD20 gene and a nucleic acid molecule which down  
CC regulates expression of a neurite growth inhibitor gene (NOGO). The  
CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a  
CC DNazyme) an Inozyme (an endolytic nucleic acid cleaving a an RNA molecule  
CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) pr  
CC an amberzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA  
CC with a VGY motif). The CD20-targetting nucleic acid is used to cleave RNA  
CC of CD20 in the presence of a divalent cation that is preferably Mg<sup>2+</sup>.  
CC Furthermore, it may be contacted with a cell to reduce CD20 activity of  
CC the cell and treat a patient having a condition associated with the level  
CC of CD20. The treatment may further comprise the use of one or more  
CC therapies. In particular, the CD20 targetting nucleic acid may be used to  
CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-  
CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic  
CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell  
CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,  
CC immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-  
CC targetting nucleic acid is used to cleave RNA of the NOGO gene in the  
CC presence of a divalent cation that is preferably Mg<sup>2+</sup>. Furthermore, the  
CC nucleic acid may be contacted with a cell to reduce NOGO activity of the  
CC cell and treat a patient having a condition associated with the level of  
CC NOGO. The treatment may further comprise the use of one or more  
CC therapies. In particular, the NOGO-targetting nucleic acid may be used to  
CC treat central nervous system (CNS) injury and cerebrovascular accident  
CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),  
CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),  
CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob  
CC disease, muscular dystrophy, and/or other neurodegenerative disease  
CC states which respond to the modulation of NOGO expression. The present  
XX sequence is a hammerhead ribozyme of the invention  
SQ Sequence 17 BP; 7 A; 2 C; 0 G; 0 T; 8 U; 0 Other;  
Query Match 0.4%; Score 11.8; DB 1; Length 17;  
Best Local Similarity 33.3%; Pred. No. 5.9e+03;  
Matches 5; Conservative 8; Mismatches 2; Indels 0; Gaps 0;  
QY 2469 TTAATATTAACITTT 2483  
Db 1 UUAUAUUAUAAAUUU 15  
RESULT 5555  
ABK02791  
ID ABK02791 standard; RNA; 17 BP.  
XX  
AC ABK02791;

CC blood coagulation factor VIII protein of the invention.  
XX  
SQ Sequence 25 BP; 1 A; 8 C; 8 G; 8 T; 0 U; 0 Other;  
  
Query Match 0.4%; Score 12; DB 1; Length 25;  
Best Local Similarity 100.0%; Pred. No. 5.9e+03;  
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 607 CCTGCTGCTGCC 618  
Db 8 CCTGCTGCTGCC 19  
  
RESULT 5551  
AAX69437/c  
ID AAX69437 standard; RNA; 17 BP.  
XX  
AC AAX69437;  
XX  
DT 28-JUL-1999 (first entry)  
XX  
DE Human flt1 VEGF receptor hammerhead ribozyme substrate #732.  
XX  
KW Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;  
KW KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;  
KW tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;  
KW fms-like tyrosine kinase 1; kinase insert domain containing receptor;  
KW foetal liver kinase 1; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO9715662-A2.  
XX  
PD 01-MAY-1997.  
XX  
PF 25-OCT-1996; 96WO-US017480.  
XX  
PR 26-OCT-1995; 95US-0005974P.  
PR 11-JAN-1996; 96US-00584040.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
PA (CHIR ) CHIRON CORP.  
XX  
PI Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;  
XX  
DR WPI; 1997-259017/23.  
XX  
PT Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA  
PT stability - useful for treating e.g. tumour angiogenesis, psoriasis,  
PT rheumatoid arthritis, etc., in a human patient.  
XX  
PS Claim 4; Page 68; 218pp; English.  
XX  
CC The present invention describes nucleic acid molecules which modulate the  
CC synthesis, expression and/or stability of a mRNA encoding 1 or more  
CC receptors of vascular endothelial growth factor (VEGF). A patient  
CC (preferably human) having a condition associated with the level of the  
CC fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing  
CC receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour  
CC angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be  
CC treated by administering the nucleic acid molecule or the expression  
CC vector to the patient. AAX67275 to AAX75752 represent specific examples  
CC of nucleic acid molecules from the present invention  
XX  
SQ Sequence 17 BP; 1 A; 2 C; 2 G; 0 T; 12 U; 0 Other;  
  
Query Match 0.4%; Score 11.8; DB 1; Length 17;  
Best Local Similarity 86.7%; Pred. No. 5.9e+03;  
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 2782 ATTGAAAAA 2796  
Db 17 AGTCAAAAAA 3

RESULT 5552  
AAF06380/c  
ID AAF06380 standard; DNA; 17 BP.  
XX  
AC AAF06380;  
XX  
DT 16-FEB-2001 (first entry)  
XX  
DE Hammerhead ribozyme substrate #3177.  
XX  
KW Ribozyme; erythropoietin; granulocyte colony stimulating factor;  
KW interferon alpha; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO200061729-A2.  
XX  
PD 19-OCT-2000.  
XX  
PF 11-APR-2000; 2000WO-US009721.  
XX  
PR 12-APR-1999; 99US-0129390P.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
XX  
PI Blatt L, Zwick M, Pavco P, Mcswiggen J;  
XX  
DR WPI; 2000-647423/62.  
XX  
PT Enzymatic and antisense nucleic acid inhibition of repressor genes,  
PT useful for producing e.g. granulocyte colony stimulating factor protein,  
PT interferon alpha and erythropoietin.  
XX  
PS Claim 42; Page 128; 164pp; English.  
XX  
CC The present invention relates to enzymatic and antisense nucleic acid  
CC molecules that act as inhibitors of the expression of repressor genes  
CC encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription  
CC factor gene, IRF-2 and/or the CAAT Displacement Protein (CDP).  
CC Inhibition of the repressors removes prevents inhibition (and  
CC consequently increases expression of) genes involved in the production of  
CC erythropoietin, granulocyte colony stimulating factor protein and  
CC interferon alpha  
XX  
SQ Sequence 17 BP; 3 A; 0 C; 1 G; 0 T; 13 U; 0 Other;  
  
Query Match 0.4%; Score 11.8; DB 1; Length 17;  
Best Local Similarity 86.7%; Pred. No. 5.9e+03;  
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 2779 AGAATTGAAAAA 2793  
Db 16 AAAATTAAAAA 2  
  
RESULT 5553  
AAX69438/c  
ID AAX69438 standard; RNA; 17 BP.  
XX  
AC AAX69438;  
XX  
DT 28-JUL-1999 (first entry)  
XX  
DE Human flt1 VEGF receptor hammerhead ribozyme substrate #733.  
XX  
KW Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;  
KW KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;  
KW tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;  
KW fms-like tyrosine kinase 1; kinase insert domain containing receptor;  
KW foetal liver kinase 1; ss.  
XX

PN US5962332-A.  
XX  
PD .05-OCT-1999.  
XX  
PF 11-DEC-1995; 95US-00570155.  
XX  
PR 17-MAR-1994; 94US-00214823.  
PR 07-MAR-1995; 95US-00399499.  
XX  
PA (UYMA-) UNIV MASSACHUSETTS.  
XX  
PI Taneja KL, Singer RH;  
XX WPI; 1999-579615/49.  
DR  
XX  
XX Detection of trinucleotide repeats.  
PT  
XX  
PS Disclosure; Col 20; 18pp; English.  
XX  
CC This oligonucleotides is targeted to the CGG trinucleotide repeats found  
CC in the FMR1 gene. Excessive numbers of the trinucleotide repeats in the  
CC FMR1 gene leads to the disease Fragile X syndrome. This sequence is used  
CC as an antisense oligonucleotide probe for the hybridisation reaction. The  
CC invention relates to a method for the detection of trinucleotide repeat  
CC expansion, e.g. in the FMR1 gene or Mt-PK gene (leading to myotonic  
CC dystrophy) by in situ hybridization  
XX  
SQ Sequence 24 BP; 0 A; 14 C; 6 G; 2 T; 0 U; 2 Other;  
  
Query Match 0.4%; Score 12; DB 1; Length 24;  
Best Local Similarity 71.4%; Pred. No. 6.1e+03;  
Matches 15; Conservative 0; Mismatches 6; Indels 0; Gaps 0;  
  
QY 415 CGCGCGCGCCATCAACCCCT 435  
Db |||||  
4 CGCGCGCGCGCGCGCGCT 24  
  
RESULT 5549  
AAC91733/c  
ID AAC91733 standard; DNA; 24 BP.  
XX  
AC AAC91733;  
XX  
DT 27-MAR-2001 (first entry)  
XX  
DE Human pollinosis-associated gene 787 RACE PCR primer, SEQ ID NO:17.  
XX  
KW Human; pollinosis-associated gene 787; pollen allergy; T-cell;  
KW reduced expression; detection; diagnosis; drug screening;  
KW allergic disease; PCR primer; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO200073440-A1.  
XX  
PD 07-DEC-2000.  
XX  
PF 18-MAY-2000; 2000WO-JP003192.  
XX  
PR 27-MAY-1999; 99JP-00148785.  
XX  
PA (GENO-) GENOX RES INC.  
PA (EISA ) EISAI CO LTD.  
XX  
PI Nagasu T, Sugita Y, Kashiwabara T, Oshida T, Obayashi M, Gunji S;  
PI Obayashi I, Imai Y, Yoshida N, Ogawa K, Matsui K, Takahashi E;  
PI Yokoi A;  
XX  
DR WPI; 2001-032159/04.  
XX  
PT Pollinosis-associated gene 787 undergoing significantly low expression in  
PT subjects after pollen scattering, useful in diagnosis of allergic

PT diseases and screening candidate compounds to regulate response of T  
PT cells to antigen stimulus.  
XX  
PS Example 12; Page 26-27; 54pp; Japanese.  
XX  
CC The invention relates to the human pollinosis-associated gene 787 which  
CC exhibits significantly reduced expression in the T-cells of individuals  
CC after the pollen-scattering season, relative to expression levels in T-  
CC cells before the pollen-scattering season. The gene was isolated from T-  
CC cells from individuals allergic to pollen using the differential display  
CC method. The invention also relates to pollinosis-associated gene 787  
CC primers and probes; methods of detection of pollinosis-associated gene  
CC 787 nucleic acids; and a method of diagnosis of allergic diseases via the  
CC detection of pollinosis-associated gene 787 nucleic acids. The invention  
CC additionally encompasses a method of screening drug candidates for the  
CC treatment of allergic disease by measuring the expression of pollinosis-  
CC associated gene 787 in pollen antigen-stimulated T-cells in the presence  
CC of a test compound relative to a control. Pollinosis-associated gene 787  
CC is useful in the diagnosis of allergic diseases and in the screening of  
CC drug candidates for the treatment of such diseases. The present sequence  
CC represents a PCR primer used in the isolation of human pollinosis-  
CC associated gene 787 cDNA  
XX  
SQ Sequence 24 BP; 5 A; 10 C; 2 G; 7 T; 0 U; 0 Other;  
  
Query Match 0.4%; Score 12; DB 1; Length 24;  
Best Local Similarity 75.0%; Pred. No. 6.1e+03;  
Matches 15; Conservative 0; Mismatches 5; Indels 0; Gaps 0;  
  
QY 1494 AGAAATGGAGAACACAGG 1513  
Db |||||  
23 AGAGAGTGGAGATTTCAGAGG 4  
  
RESULT 5550  
ADE64628  
ID ADE64628 standard; DNA; 25 BP.  
XX  
AC ADE64628;  
XX  
DT 29-JAN-2004 (first entry)  
XX  
DE Recombinant blood coagulation factor VIII protein related oligo #34.  
XX  
KW blood coagulation factor VIII; type-A haemophilia; ss.  
XX  
OS Unidentified.  
XX  
PN CN1361178-A.  
XX  
PD 31-JUL-2002.  
XX  
PF 29-DEC-2000; 2000CN-00137779.  
XX  
PR 29-DEC-2000; 2000CN-00137779.  
XX  
PA (SHAN-) SHANGHAI BIO-CHEM INST CHINESE ACAD SCI.  
XX  
PI Qi Z, Wang Q, Chen C;  
XX WPI; 2002-741852/81.  
DR  
XX  
PT New recombinant blood coagulation factor VIII and its production process  
PT and medicinal composition.  
XX  
PS Example 6; Page 18 (disclosure); 31pp; Chinese.  
XX  
CC The invention relates to a novel recombinant blood coagulation factor  
CC VIII, its production process and its medicinal composite for treating  
CC type-A haemophilia. The invention further comprises a medicinal  
CC composition containing the blood coagulation factor which promotes blood  
CC coagulation to the blood plasma of type-A haemophilia patients. This  
CC polynucleotide sequence represents an oligo relating to the recombinant





CC (orange) which involves extracting DNA from the sample, carrying out an  
CC amplification reaction using primers which are able to amplify a region  
CC of DNA comprising part of the C. reticulata 1120 bp sequence given in the  
CC specification, but not the corresponding part of the C. sinensis 1140 bp  
CC sequence also given in the specification, and detecting the presence of  
CC amplified product. This method can be used for detecting or identifying  
CC plants or plant derived material within food products. It can be used to  
CC detect certain fruit species in particular citrus fruits such as  
CC mandarin, e.g. within fruit containing food products or juice products,  
CC or particular oil components such as olive oil, to determine the  
CC authenticity of the products. The analysis by PCR amplification and  
CC restriction fragment length polymorphism (RFLP) analysis of chloroplast  
CC DNA can be used to distinguish between closely related plant species,  
CC including species which are closely related

SQ Sequence 22 BP; 14 A; 1 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 0.4%; Score 12; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 6.3e+03;  
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1496 AAAATGGAGAAA 1507  
DB 11 AAAATGGAGAAA 22

RESULT 5544  
AAQ90036/c  
ID AAQ90036 standard; cDNA to mRNA; 22 BP.  
XX  
AC AAQ90036;

DT 03-JAN-1996 (first entry)  
DE Human SMP30 gene PCR primer.

XX SMP30; marker protein; ageing; organ development; ss.

OS Homo sapiens.

XX JP07097399-A.

PD 11-APR-1995.

PF 29-SEP-1993; 93JP-00265681.

PR 29-SEP-1993; 93JP-00265681.

PA (FJRE ) FUJI REBIO KK.

XX WPI; 1995-175363/23.

PT Novel polypeptide for detecting human ageing marker protein SMP30 - for  
PT monitoring liver and kidney development in new-born babies.

PS Example 2; Page 5; 10pp; Japanese.

XX  
CC AAQ90036-Q90039 are PCR primers used to produce the SMP30 gene  
CC (AAQ90035). which encodes the human ageing marker protein, SMP30  
CC (AAR74219). Human SMP30 is found in human organs, tissues, blood, urine  
CC and cerebrospinal fluid. The blood concentration of SMP30 is known to  
CC increase with renal and hepatic deficiencies and to decrease with age. It  
CC is therefore useful in the monitoring of renal or hepatic deficiencies  
CC and for the monitoring of the development of the liver and kidneys in  
CC newborn babies

SQ Sequence 22 BP; 1 A; 4 C; 5 G; 12 T; 0 U; 0 Other;

Query Match 0.4%; Score 12; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 6.3e+03;  
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2786 AAAAAAAAAAAA 2797

Db 22 AAAAAAAAAAAA 11

RESULT 5545  
AAT62686/c  
ID AAT62686 standard; DNA; 22 BP.

XX AAT62686;

AC AAT62686;

XX 28-MAY-1997 (first entry)

DT 28-MAY-1997 (first entry)

DE Primer for human senility marker protein gene amplification.

XX SMP30; senility marker protein; monoclonal antibody; detection; primer;

XX polymerase chain reaction; PCR; ss.

OS Synthetic.

XX JP08319298-A.

PD 03-DEC-1996.

XX 25-MAY-1995; 95JP-00149791.

PF 25-MAY-1995; 95JP-00149791.

PR 25-MAY-1995; 95JP-00149791.

XX (FJRE ) FUJI REBIO KK.

XX WPI; 1997-073109/07.

XX Anti-human senility marker protein monoclonal antibody - useful for

XX detection of protein.

PS Disclosure; Page 5; 8pp; Japanese.

XX AAT62686-89 are primers used to amplify the human senility marker protein

XX (hSMP30) gene. hSMP30 (AAW14475) has a molecular weight of 30 kDa.

CC Monoclonal antibodies recognising hSMP30 are claimed and can be used in a

CC method for detection of the hSMP30 protein in a sample

XX SQ Sequence 22 BP; 1 A; 4 C; 5 G; 12 T; 0 U; 0 Other;

Query Match 0.4%; Score 12; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 6.3e+03;  
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2786 AAAAAAAAAAAA 2797

Db 22 AAAAAAAAAAAA 11

RESULT 5546

ABS52173

ID ABS52173 standard; DNA; 22 BP.

XX ABS52173;

AC ABS52173;

XX 05-NOV-2002 (first entry)

DT Human forward primer Ag781.

DE Human; NOVX; NOVX-associated disorder; cardiomyopathy; atherosclerosis;  
XX cell signal processing; metabolic pathway modulation; neurodegenerative disorder; acne;  
XX obesity; diabetes; infectious disease; Parkinson's disease; immune disorder; cancer;  
XX Alzheimer's disease; cirrhosis; pancreatitis; learning defect;  
XX haematopoietic disorder; infertility; congenital heart defect; hair growth;  
XX memory defect; infertility; endocrine disorder; respiratory disease; health;  
XX pigmentation disorder; endocrine disease; reproductive; neurological disease;  
XX gastro-intestinal disease; endocrine disease; allergy; inflammation;  
XX bone marrow transplantation; endocrine disease; urinary system disorder; age-related disorder;  
XX nephrological disorder; EGF-related protein; SCUBE1; TEN-M4;

CC syncytial virus, hepatitis B virus, human cytomegalovirus and HTLV I and  
CC II  
XX Sequence 21 BP; 0 A; 0 C; 17 G; 4 T; 0 U; 0 Other;  
SQ  
Query Match 0.4%; Score 12; DB 1; Length 21;  
Best Local Similarity 75.0%; Pred. No. 6.4e+03;  
Matches 15; Conservative 0; Mismatches 5; Indels 0; Gaps 0;  
QY 291 CCGCGCCACCCCTCTCCAC 310  
Db 21 CCGCCCCACCCCAACCAC 2  
RESULT 5542  
ADA26144/c  
ID ADA26144 standard; RNA; 21 BP.  
XX  
AC ADA26144;  
XX  
DT 20-NOV-2003 (first entry)  
XX  
DE Human REL-A short interfering nucleic acid SEQ ID NO:279.  
XX  
KW short interfering nucleic acid; siNA; nuclear factor kappa B; NF-kappaB;  
KW RNA interference; vasotropic; nootropic; antiparkinsonian;  
KW neuroprotective; cytostatic; antiinflammatory; antiallergic; virucide;  
KW anti-HIV; immunosuppressive; anticonvulsant; nephrotropic; gene therapy;  
KW modulation; inhibition; restenosis; central nervous system lesion;  
KW Alzheimer's disease; Parkinson's disease; Huntington's disease; epilepsy;  
KW dementia; amyotrophic lateral sclerosis; cancer;  
KW polycystic kidney disease; inflammatory disease; allergic disease;  
KW viral infection; HIV; autoimmune disease; transplant rejection; ribozyme;  
KW human; v-rel reticuloendotheliosis viral oncogene homologue A; REL-A;  
KW nuclear factor; ss.  
XX  
OS Synthetic.  
OS Homo sapiens.  
XX  
PN WO2003070970-A2.  
XX  
PD 28-AUG-2003.  
XX  
PF 20-FEB-2003; 2003WO-US004951.  
XX  
PR 20-FEB-2002; 2002US-0358580P.  
PR 11-MAR-2002; 2002US-0363124P.  
PR 06-JUN-2002; 2002US-0386782P.  
PR 29-AUG-2002; 2002US-0406784P.  
PR 05-SEP-2002; 2002US-0408378P.  
PR 09-SEP-2002; 2002US-0409293P.  
PR 15-JAN-2003; 2003US-0440129P.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
XX  
PI Mcswiggen J, Beigelman L;  
XX  
DR WPI; 2003-689788/65.  
XX  
PT New short interfering nucleic acid downregulates expression of the NF-  
PT kappaB gene useful e.g. for treatment and diagnosis of cancer and  
PT inflammation.  
XX  
PS Example 3; Page 131; 149pp; English.  
XX  
CC The present invention describes a short interfering nucleic acid (siNA)  
CC that downregulates expression of a nuclear factor kappa B (NF-kappaB)  
CC gene by RNA interference. Also described: (1) kits for in vitro or in  
CC vivo delivery of siNA; (2) conjugates and/or complexes of siNA; and (3)  
CC vectors that express siNA. The siNAs have vasotropic, nootropic,  
CC antiparkinsonian, neuroprotective, cytostatic, antiinflammatory,  
CC antiallergic, virucide, anti-HIV, immunosuppressive, anticonvulsant and  
CC nephrotropic activities, and can be used in gene therapy, and for the

CC modulation (inhibition) of expression or activity of NF-kappaB by RNA  
CC interference (siNA target mRNA, RNA splice variants, post-  
CC transcriptionally modified RNA, pre-RNA and/or RNA templates). The siNA  
CC sequences can be used to modulate expression of NF-kappaB genes, in  
CC cells, tissue explants or organisms, e.g. by ex vivo gene therapy, in  
CC grafts and transplants for treating restenosis and central nervous system  
CC lesions and injuries (Alzheimer's, Parkinson's or Huntington's diseases,  
CC epilepsy, dementia or amyotrophic lateral sclerosis) or for treating many  
CC cancers, other proliferative diseases (restenosis and polycystic kidney  
CC disease), inflammatory and/or allergic diseases, viral infections  
CC (including HIV), autoimmune diseases and transplant rejection, and also  
CC for drug screening; diagnosis; target identification and validation;  
CC genetic engineering; pharmacogenomics; studying gene function and gene  
CC mapping (e.g. of single-nucleotide polymorphisms). The present sequence  
CC represents human v-rel reticuloendotheliosis viral oncogene homologue A  
CC (REL-A) synthetic modified siNA construct, which is used in the  
CC exemplification of the present invention. REL-A is a nuclear factor of  
CC the kappa light polypeptide gene enhancer in B-cells.  
XX  
SQ Sequence 21 BP; 7 A; 2 C; 7 G; 2 T; 3 U; 0 Other;  
Query Match 0.4%; Score 12; DB 1; Length 21;  
Best Local Similarity 75.0%; Pred. No. 6.4e+03;  
Matches 15; Conservative 0; Mismatches 5; Indels 0; Gaps 0;  
QY 2314 AATTTGTTGCTGCTGTCTAC 2333  
Db 21 AACTTTCTGCACCTGTCTAC 2  
RESULT 5543  
AAV26091  
ID AAV26091 standard; DNA; 22 BP.  
XX  
AC AAV26091;  
XX  
DT 27-AUG-1998 (first entry)  
XX  
DE Mandarin mb2chl gene PCR primer.  
XX  
KW Orange; mandarin; detection; chloroplast DNA; identification; fruit;  
KW citrus; plant; food product; olive oil; fruit juice; PCR primer; ss.  
XX  
OS Synthetic.  
OS Citrus reticulata.  
XX  
PN WO9814607-A1.  
XX  
PD 09-APR-1998.  
XX  
PF 30-SEP-1997; 97WO-GB002688.  
XX  
PR 02-OCT-1996; 96GB-00020498.  
PR 20-NOV-1996; 96GB-00024083.  
XX  
PA (UKAG-) UK MIN AGRIC FISHERIES & FOOD.  
XX  
PI Knight AI;  
XX  
DR WPI; 1998-240104/21.  
XX  
PT Detection of particular plant species, especially in food products - by  
PT extracting chloroplast DNA from the product and detecting a sequence  
PT which is characteristic of the plant species.  
XX  
PS Claim 20; Page 19; 31pp; English.  
XX  
CC AAV26085-V26096 are PCR primers used in a method of detecting a  
CC particular plant species in a product, in this case orange and mandarin.  
CC The method involves extracting chloroplast DNA from the product and  
CC analysing the DNA to detect a sequence which is characteristic of the  
CC particular plant species. The example used is a method for detecting the  
CC presence of C. reticulata (mandarin) in a sample containing C. sinensis

CC The oligonucleotides (See AAQ79201-52) can be used to treat viral  
CC infections. The oligonucleotides inhibit viral replication by forming  
CC guanosine tetrads which form a stabilised 3D structure. Preferred  
CC oligonucleotides contain at least 2 runs of at least 2 guanosine bases  
CC and may be capped at the 3' terminus with a modifier selected from  
CC polyamine, poly-L-lysine, cholesterol and propanolamine. They may also  
CC have a modified phosphodiester linkage or be modified to contain a  
CC phosphorothioate linkage. They are used to treat infections with viruses  
CC such as herpes simplex virus, human papilloma virus, Epstein-Barr virus,  
CC HIV, adenovirus, respiratory syncytial virus, hepatitis B virus or human  
CC cytomegalovirus. (Updated on 25-MAR-2003 to correct PN field.)  
XX  
SQ Sequence 21 BP; 0 A; 0 C; 17 G; 4 T; 0 U; 0 Other;

Query Match 0.4%; Score 12; DB 1; Length 21;  
Best Local Similarity 75.0%; Pred. No. 6.4e+03;  
Matches 15; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 291 CCGCGCCACCCCTCTCCAC 310  
Db 21 CCCCCCACCACCCCAACCAC 2

RESULT 5540  
AAT51628/c

ID AAT51628 standard; DNA; 21 BP.

XX  
AC AAT51628;

XX  
DT 12-NOV-1997 (first entry)

XX  
DE Viral integrase inhibiting oligonucleotide.

XX  
KW Human immunodeficiency virus; HIV; Epstein Barr virus; EBV;  
KW herpes simplex virus; HSV; human papilloma virus; HPV; adenovirus;  
KW respiratory syncytial virus; RSV; cytomegalovirus; CMV; hepatitis B;  
KW integrase inhibition; guanosine tetrad; ss.

XX  
OS Synthetic.

XX  
PN WO9703997-A1.

XX  
PD 06-FEB-1997.

XX  
PF 17-JUL-1996; 96WO-US011786.

XX  
PR 19-JUL-1995; 95US-0001505P.

XX  
PR 23-OCT-1995; 95US-00535168.

XX  
PR 19-MAR-1996; 96US-0013688P.

XX  
PR 25-MAR-1996; 96US-0014007P.

XX  
PR 17-APR-1996; 96US-0015714P.

XX  
PR 23-APR-1996; 96US-0016271P.

XX  
PA (ARON-) ARONEX PHARM INC.

XX  
PI Rando RF, Fennewald S, Zendegui JG, Ojwang JO, Hogan ME;

PI  
PI Pommier Y, Mazumder A;

XX  
DR WPI; 1997-132569/12.

XX  
PT Oligo:nucleotide(s) capable of forming guanosine tetrads - inhibit viral  
PT enzyme responsible for integrating viral nucleic acid into the host  
PT genome.

PS Claim 3; Page 145; 245pp; English.

XX  
CC AAT51619-T51698 are oligonucleotides used to inhibit the production of  
CC viruses within a host cell. The oligonucleotides may form guanosine  
CC tetrads (structures formed of eight hydrogen bonds by coordination of the  
CC four oxygen atoms of guanine with alkali cations believed to bind to the  
CC centre of a quadruplex, and by strong stacking interactions) and are used  
CC to prevent the integration of viral nucleic acid into a host genome. The  
CC oligonucleotides inhibit functioning of the integrase enzyme and hence

CC prevent viral infection. Viral infections that may be treated include  
CC human immunodeficiency virus (HIV), Epstein Barr virus (EBV), herpes  
CC simplex virus (HSV), human papilloma virus (HPV), adenovirus, respiratory  
CC syncytial virus (RSV), cytomegalovirus (CMV) and hepatitis B virus (HBV),  
CC especially HIV-1 infection

SQ Sequence 21 BP; 0 A; 0 C; 17 G; 4 T; 0 U; 0 Other;

Query Match 0.4%; Score 12; DB 1; Length 21;  
Best Local Similarity 75.0%; Pred. No. 6.4e+03;  
Matches 15; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 291 CCGCGCCACCCCTCTCCAC 310  
Db 21 CCCCCCACCACCCCAACCAC 2

RESULT 5541  
AAX79217/c

ID AAX79217 standard; DNA; 21 BP.

XX  
AC AAX79217;

XX  
DT 31-AUG-1999 (first entry)

XX  
DE Cligonucleotide #10 forms an intramolecular stacked tetrad structure.

XX  
KW Column; box; stacked tetrad; inhibition; replication; pathophysiological;  
KW herpes simplex virus; HSV; human papilloma virus; Epstein Barr Virus;  
KW HPV; EBV; HIV; human immunodeficiency virus; adenovirus; RSV; HBV; HCMV;  
KW respiratory syncytial virus; hepatitis B virus; human cytomegalovirus;  
KW human T-cell leukaemia virus; HTLV; ss.

XX  
OS Synthetic.

XX  
FH Key Location/Qualifiers

FT modified\_base 1..21

FT /\*tag= a

FT /note= "optionally contains phosphodiester

FT internucleotide linkages"

FT misc\_structure 1..21

FT /\*tag= b

FT /note= "forms intramolecular stacked tetrad or 3D

FT columnar box structure"

WO9833807-A1.

06-AUG-1998.

03-FEB-1998; 98WO-US001974.

04-FEB-1997; 97US-0037374P.

09-DEC-1997; 97US-00987574.

(ARON-) ARONEX PHARM INC.

Rando RF, Ojwang JO, Hogan ME, Wallace TL, Cossum PA;

WPI; 1998-446809/38.

XX  
PT New guanosine-rich tetrad forming oligonucleotide(s) - used for  
PT inhibiting virus replication for treating e.g. herpes simplex, papilloma,  
PT HIV, adenovirus or hepatitis B virus infection.

PS Disclosure; Page 137; 140pp; English.

XX  
CC Sequences AAX79210-X79275 represent oligonucleotides (ON) which are able  
CC to form a columnar box or "stacked tetrad" structure by intramolecular  
CC internucleotide binding. The ONs are used to inhibit the replication of  
CC viruses. They are able to suppress virus production for prolonged periods  
CC after an initial short treatment regimen. They can be used for treating  
CC pathophysiological states caused by viruses such as herpes simplex virus,  
CC human papilloma virus, Epstein Barr Virus, HIV, adenovirus, respiratory



XX (TRIP-) TRIPLEX PHARM CORP.  
PA (BAYU ) BAYLOR COLLEGE MEDICINE.  
XX Jayaraman K, Vu H, Zendequi J, Hogan ME;  
XX WPI; 1994-083097/10.  
XX New method of binding synthetic triplex forming oligonucleotide - in  
PT which the nucleotide is modified with a lipophilic cpd. is useful in  
PT treatment of cell proliferative states and viral infections.  
XX Example; Page 40; 86pp; English.  
XX Triplex forming oligos (TFOs) bind to DNA in a site selective manner. The  
CC biological effect of a TFO is potentiated by modification with lipophilic  
CC cpds., selected from cholesterol, vitamin E and 1,2-di-O- hexadecyl-3-  
CC glyceryl. TFO-linker-cholesterol is used for the treatment of cell  
CC proliferative states (breast, lung and cervical cancers) and in  
CC infections by viruses (Herpes simplex virus type 2 and human  
CC immunodeficiency virus (HIV)). (Updated on 25-MAR-2003 to correct PN  
CC field.)  
XX Sequence 21 BP; 0 A; 0 C; 17 G; 4 T; 0 U; 0 Other;  
SQ Query Match 0.4%; Score 12; DB 1; Length 21;  
Best Local Similarity 75.0%; Pred. No. 6.4e+03;  
Matches 15; Conservative 0; Mismatches 5; Indels 0; Gaps 0;  
QY 291 CCGCGGCCACCCCTCTCCAC 310  
Db ||| ||||| |||||  
21 CCCCCCACCACCCCAACCAC 2  
RESULT 5538  
AAQ67230/c  
ID AAQ67230 standard; DNA; 21 BP.  
XX  
AC AAQ67230;  
XX 25-MAR-2003 (revised)  
DT 22-SEP-1994 (first entry)  
XX Triple helix-forming oligonucleotide.  
DE Triple helix; oligonucleotide; TFO; lipophile; cholesterol; Vitamin E;  
XX glyceryl; anticancer; antiviral; herpes simplex; HIV; human;  
KW immunodeficiency virus.  
XX Synthetic.  
OS WO9404550-A1.  
XX 03-MAR-1994.  
XX 17-AUG-1993; 93WO-US007743.  
XX 21-AUG-1992; 92US-00934065.  
PR 23-APR-1993; 93US-00053040.  
XX (TRIP-) TRIPLEX PHARM CORP.  
PA (BAYU ) BAYLOR COLLEGE MEDICINE.  
XX Jayaraman K, Vu H, Zendequi J, Hogan ME;  
XX WPI; 1994-083097/10.  
XX New method of binding synthetic triplex forming oligonucleotide - in  
PT which the nucleotide is modified with a lipophilic cpd. is useful in  
PT treatment of cell proliferative states and viral infections.  
XX Claim 25; Page 40; 86pp; English.

CC The invention relates to a method of enhancing sequence specific binding  
CC of a synthetic triplex-forming oligonucleotide (TFO) involving the step  
CC of contacting the TFO with a cell. The TFO comprises a nucleotide  
CC sequence of at least 20 nucleotides including a G and a T, is chemically  
CC modified with a lipophilic compound and is capable of binding to a DNA  
CC duplex target to form a triple helix. The lipophilic compound is  
CC preferably cholesterol, vitamin E or 1,2-di-O-hexadecyl 3-glyceryl and is  
CC joined to the nucleotide via a linker. The TFO is useful medically for  
CC treating cell proliferative states such as breast, lung and cervical  
CC cancers, and for treating viral infections such as caused by Herpes  
CC simplex type 2 or HIV. The biological effect of the TFO is potentiated by  
CC modification with the lipophilic compound. The present sequence is one of  
CC 9 specific nucleotide sequences disclosed for use in forming the TFO  
CC (AAQ67224 - AAQ67232). The TFO is formed by attaching cholesterol to the  
CC 3' end. This TFO is active against HSV-2. (Updated on 25-MAR-2003 to  
CC correct PN field.)  
XX Sequence 21 BP; 0 A; 0 C; 17 G; 4 T; 0 U; 0 Other;  
SQ Query Match 0.4%; Score 12; DB 1; Length 21;  
Best Local Similarity 75.0%; Pred. No. 6.4e+03;  
Matches 15; Conservative 0; Mismatches 5; Indels 0; Gaps 0;  
QY 291 CCGCGGCCACCCCTCTCCAC 310  
Db ||| ||||| |||||  
21 CCCCCCACCACCCCAACCAC 2  
RESULT 5539  
AAQ79210/c  
ID AAQ79210 standard; DNA; 21 BP.  
XX  
AC AAQ79210;  
XX 25-MAR-2003 (revised)  
DT 17-JUL-1995 (first entry)  
XX Guanosine rich oligonucleotide used to treat viral infection.  
DE Guanosine; tetrad; inhibition; replication; virus; treatment; therapy;  
XX infection; herpes simplex virus; human papilloma virus;  
KW Epstein-Barr virus; HIV, adenovirus; respiratory syncytial virus;  
KW hepatitis B virus; human cytomegalovirus; ss.  
XX Synthetic.  
OS Key Location/Qualifiers  
FH misc\_feature 31  
FT /\*tag= a  
FT /mod\_base  
FT /note= "Propanolamine group attached to this base."  
XX WO9425037-A1.  
XX 10-NOV-1994.  
XX 25-APR-1994; 94WO-US004529.  
XX 23-APR-1993; 93US-00053027.  
PR 28-OCT-1993; 93US-00145704.  
XX (TRIP-) TRIPLEX PHARM CORP.  
PA (BAYU ) BAYLOR COLLEGE MEDICINE.  
XX Rando RF, Fennewald S, Zendequi JG, Ojwang JO, Hogan ME;  
XX WPI; 1994-357890/44.  
XX Oligo-nucleotide(s) rich in guanosine which form guanosine tetrads - used  
PT to treat viral infections, e.g. herpes-virus and HIV.  
XX Claim 41; Page 49; 101pp; English.

NYCE JW, LI Y, SANDRASAGRA A, KATZ E, PABALAN J, AGUILAR D;  
MILLER S; TANG L, SHAHABUDDIN S;  
WPI; 2003-229219/22.

Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or ubiquinone.

Disclosure; SEQ ID NO 10806; 872pp; English.

The invention relates to a novel pharmaceutical composition, which has a first active agent comprising an oligonucleotide antisense to the initiation codon, coding region, 5' or 3' end genomic flanking regions, 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of junctions of genes encoding a polypeptide associated with lung and/or nasal airway dysfunction and a second active agent comprising an antiinflammatory steroid and ubiquinone. A composition of the invention has antiinflammatory, antiallergic, antiasthmatic, hypotensive, immunosuppressive, and cytostatic activity. The composition may have a use in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or malignant disease or condition, also for enhancing the prophylactic or therapeutic respiratory effect of an antiinflammatory steroid in a subject, for reducing or depleting levels of, or reducing sensitivity to adenosine, reducing levels of adenosine receptor, producing bronchodilation, increasing levels of ubiquinone or lung surfactant in a subject's tissue, or treating bronchoconstriction, lung inflammation, lung allergies, or a respiratory disease or condition. Note: The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from WIPO at [ftp.wipo.int/pub/published\\_pct\\_sequences](http://ftp.wipo.int/pub/published_pct_sequences)

Sequence 21 BP; 0 A; 8 C; 10 G; 3 T; 0 U; 0 Other;

Query Match	0.4%	Score 12;	DB 1;	Length 21;
Best Local Similarity	75.0%	Pred. No. 6.4e+03;		
Matches 15;	Conservative 0;	Mismatches 5;	Indels 0;	Gaps 0
QY	238	TGGGAATCCGCGGGTCCCCC	257	
Db	2	TGGGCGCGCGGGTCTCC	21	

RESULT 5537	
AAQ55571/c	
ID AAQ55571 standard; DNA; 21 BP.	
XX	
AC AAQ55571;	
XX	
DT 25-MAR-2003 (revised)	
DT 17-AUG-1994 (first entry)	
XX	
DE Sequence of synthetic triplex forming oligo (TFO) B-133-54, anti-HSV 2	
DE TFO.	
XX	
KW Triplex forming oligonucleotide; TFO; sequence specific binding; ss.	
XX	
OS Synthetic.	
XX	
PH Key	Location/Qualifiers
FT misc_feature	21
FT	/*tag= a
FT	/label= G-cholesterol
XX	
PN WO9404550-A1.	
XX	
PD 03-MAR-1994.	
XX	
PF 17-AUG-1993; 93WO-US007743.	
XX	
PR 21-AUG-1992; 92US-00934065.	
PR 23-APR-1993; 93US-00053040.	

CC conditions or mixtures. The antisense oligonucleotides may be derived  
CC from sequences AAX55272-74. These multiple target oligonucleotides  
CC (specifically AAX55180-271) can be used for the antisense treatment of  
CC diseases and conditions. Typical diseases and conditions are those  
CC associated with impaired respiration and inflammation, including lung  
CC diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis,  
CC acute asthma, allergies, asthma, impeded respiration, respiratory  
CC distress syndrome, pain, cystic fibrosis, pulmonary hypertension,  
CC pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary  
CC disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g.  
CC colon cancer, breast cancer, lung cancer, pancreatic cancer,  
CC hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, as  
CC well as all types of cancers which may metastasize or have metastasized  
CC to the lungs, including breast and prostate cancer  
XX  
SQ Sequence 21 BP; 0 A; 8 C; 10 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 12; DB 1; Length 21;  
Best Local Similarity 75.0%; Pred. No. 6.4e+03;  
Matches 15; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 238 TGGGAATCCGCGGTCCCCC 257  
||| | | | | | | | |  
Db 2 TGGGCGCGCGGTCTCTCC 21

RESULT 5534  
AAA33748  
ID AAA33748 standard; DNA; 21 BP.

XX AAA33748;

DT 28-JUL-2000 (first entry)

XX Low adenosine antisense oligonucleotide SEQ ID NO:1437.

DE Human; adenosine receptor; low adenosine antisense oligonucleotide;  
XX phosphorothioate; impaired respiration; inflammation; allergy;  
KW allergic disease; bronchoconstriction; inhibitor; antiinflammatory;  
KW antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway;  
KW lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;  
KW respiratory distress syndrome; pain; cystic fibrosis; emphysema;  
KW pulmonary hypertension; chronic obstructive pulmonary disease; COPD;  
KW cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.

XX Homo sapiens.

OS WO200009525-A2.

PN 24-FEB-2000.

PD 03-AUG-1999; 99WO-US017712.

PF 03-AUG-1998; 98US-0095212P.

XX (UYEC-) UNIV EAST CAROLINA.

XX Nyce JW;

PI WPI; 2000-205971/18.

XX New antisense oligonucleotides useful for treating e.g. pulmonary  
PT vasoconstriction, inflammation, allergies, asthma, hypertension,  
PT bronchitis, emphysema, respiratory distress syndrome, ischemia or  
PT cancers.

XX Claim 18; Page 444; 1343pp; English.

PS The present invention describes a new composition comprising an antisense  
XX oligonucleotide (ON) with low adenosine (up to 15%), which targets  
CC nucleic acids involved in bronchoconstriction, allergies, and/or  
CC inflammation. The ON can have antiinflammatory, antiallergic,  
CC antiasthmatic, cytostatic and analgesic activities. The compositions are

CC useful for the treatment of diseases associated with inflammation,  
CC impaired airways, including lung disease and diseases whose secondary  
CC effects afflict the lungs of a subject. They can be used for treating  
CC e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma,  
CC impeded respiration, respiratory distress syndrome, pain, cystic  
CC fibrosis, pulmonary hypertension, emphysema, chronic obstructive  
CC pulmonary disease (COPD), and cancers such as leukemias, lymphomas,  
CC carcinomas, and cancers which may metastasize to the lungs, including  
CC breast and prostate cancer. The reduction of the adenosine content of the  
CC ONs reduces side effects. The A-containing ONs break down with the  
CC release of deoxyadenosine which activates adenosine receptors causing  
CC bronchoconstriction and inflammation. AAA32313 to AAA35312 represent the  
CC nucleotide sequences given in the sequence listing from the present  
CC invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185  
CC sequences are also called SEQ ID NO:1 to 185, but the sequences differ  
CC from the previously named sequences. SEQ ID NO:11 to 1680 (AAA32323 to  
CC AAA33992) are specifically claimed ONs from the present invention. N.B.  
CC Sequences given in the disclosure of the present invention do not match  
CC up with their corresponding SEQ ID NO: sequences given in the sequence  
CC listing  
XX

SQ Sequence 21 BP; 0 A; 8 C; 10 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 12; DB 1; Length 21;  
Best Local Similarity 75.0%; Pred. No. 6.4e+03;  
Matches 15; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 238 TGGGAATCCGCGGTCCCCC 257  
||| | | | | | | | |  
Db 2 TGGGCGCGCGGTCTCTCC 21

RESULT 5535  
AAF19870

ID AAF19870 standard; DNA; 21 BP.

XX AAF19870;

XX 14-MAR-2001 (first entry)

DE Human endothelial nitric oxide synthase polynucleotide fragment #1437.

XX Low adenosine antisense oligonucleotide; phosphorothioate; allergy;  
KW human; airway disorder; bronchoconstriction; lung inflammation;  
KW surfactant depletion; respiratory; bronchodilator; antiinflammatory;  
KW immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic;  
KW respiratory obstruction; pulmonary obstruction; impeded respiration;  
KW surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;  
KW respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;  
KW pulmonary hypertension; emphysema; pulmonary transplantation rejection;  
KW chronic obstructive pulmonary disease; pulmonary infection; bronchitis;  
KW cancer; ss.

XX Homo sapiens.

XX WO2000062736-A2.

XX 26-OCT-2000.

XX 24-MAR-2000; 2000WO-US008020.

XX 06-APR-1999; 99US-0127958P.

XX (UYEC-) UNIV EAST CAROLINA.

XX (NYCE/) NYCE J W.

XX Nyce JW;

XX WPI; 2000-679539/66.

XX Low adenosine (A) content antisense oligonucleotides which do not trigger  
PT adenosine receptors during metabolism, useful e.g. for treating cancers  
PT and respiratory obstructions.







PI Shannon KW, Wolber PK, Delenstarr GC, Webb PG, Kincaid RH;  
XX WPI; 2003-743746/70.  
DR  
XX Predicting potential of oligonucleotides to hybridize to target  
PT nucleotide sequence comprises determining and evaluating for each  
PT oligonucleotide a parameter predictive of the oligonucleotides ability to  
PT hybridize with target.  
XX  
PS Example 2; SEQ ID NO 774; 423pp; English.  
XX  
CC The invention relates to a method of predicting the potential of  
CC oligonucleotides to hybridize to target nucleotide sequences. The method  
CC is useful for predicting the potential of an oligonucleotide to hybridize  
CC to a target nucleotide sequence, e.g. RNA or DNA or a sequence that  
CC contains chemically modified nucleotides. The method is also useful for  
CC predicting the potential of the oligonucleotides to hybridize to a  
CC complementary target nucleotide sequence. The method is useful to predict  
CC efficient hybridisation oligonucleotides for each of multiple target  
CC sequences therefore very large arrays may be constructed and tested with  
CC minimum synthesis of oligonucleotides. The present sequence represents a  
CC HIV PRT antisense derived probe.  
XX  
SQ Sequence 20 BP; 2 A; 3 C; 1 G; 14 T; 0 U; 0 Other;  
Query Match 0.4%; Score 12; DB 1; Length 20;  
Best Local Similarity 75.0%; Pred. No. 6.3e+03;  
Matches 15; Conservative 0; Mismatches 5; Indels 0; Gaps 0;  
QY 2168 TTTTATTTTCTCTCTGTC A 20  
Db 1 TTTTATTTTCTCTCTGTC A 20  
RESULT 5530  
ADD81702  
ID ADD81702 standard; DNA; 20 BP.  
XX ADD81702;  
AC  
XX  
DT 29-JAN-2004 (first entry)  
XX  
DE HIV PRT antisense derived probe #631.  
XX  
KW ss; oligonucleotide hybridisation potential; efficient hybridisation;  
KW large array; minimum oligonucleotide synthesis; probe.  
XX  
OS Human immunodeficiency virus.  
XX  
PN US2003054346-A1.  
XX  
PD 20-MAR-2003.  
XX  
PF 15-FEB-2001; 2001US-00784674.  
XX  
PR 10-FEB-1998; 98US-00021701.  
XX  
PA (SHAN/) SHANNON K W.  
PA (WOLB/) WOLBER P K.  
PA (DELE/) DELENSTARR G C.  
PA (WEBB/) WEBB P G.  
PA (KINC/) KINCAID R H.  
XX  
PI Shannon KW, Wolber PK, Delenstarr GC, Webb PG, Kincaid RH;  
XX WPI; 2003-743746/70.  
DR  
XX Predicting potential of oligonucleotides to hybridize to target  
PT nucleotide sequence comprises determining and evaluating for each  
PT oligonucleotide a parameter predictive of the oligonucleotides ability to  
PT hybridize with target.  
XX  
PS Example 2; SEQ ID NO 775; 423pp; English.

XX The invention relates to a method of predicting the potential of  
CC oligonucleotides to hybridize to target nucleotide sequences. The method  
CC is useful for predicting the potential of an oligonucleotide to hybridise  
CC to a target nucleotide sequence, e.g. RNA or DNA or a sequence that  
CC contains chemically modified nucleotides. The method is also useful for  
CC predicting the potential of the oligonucleotides to hybridise to a  
CC complementary target nucleotide sequence. The method is useful to predict  
CC efficient hybridisation oligonucleotides for each of multiple target  
CC sequences therefore very large arrays may be constructed and tested with  
CC minimum synthesis of oligonucleotides. The present sequence represents a  
CC HIV PRT antisense derived probe.  
XX  
SQ Sequence 20 BP; 3 A; 3 C; 1 G; 13 T; 0 U; 0 Other;  
Query Match 0.4%; Score 12; DB 1; Length 20;  
Best Local Similarity 75.0%; Pred. No. 6.3e+03;  
Matches 15; Conservative 0; Mismatches 5; Indels 0; Gaps 0;  
QY 2169 TTTTATTTTCTCTCTGTC A 20  
Db 1 TTTTATTTTCTCTCTGTC A 20  
RESULT 5531  
AAA80353  
ID AAA80353 standard; DNA; 21 BP.  
XX  
AC AAA80353;  
XX  
DT 22-NOV-2000 (first entry)  
XX  
DE Human ASTH1I 5' region polymorphic site, SEQ ID NO:100 (a).  
XX  
KW ASTH1 locus; ASTH1I; ASTH1J; human; chromosome 11p; asthma;  
KW bronchial hyperreactivity; ets family; transcription factor;  
KW splice variant; genetic predisposition; polymorphism; antibody;  
KW drug screening; prophylaxis; therapy; diagnosis;  
KW single nucleotide polymorphism; SNP; ss.  
XX  
OS Homo sapiens.  
XX  
FH Key Location/Qualifiers  
FT variation replace(10..12,TA)  
FT /\*tag= a  
XX  
PN US6087485-A.  
XX  
PD 11-JUL-2000.  
XX  
PF 21-JAN-1998; 98US-00009913.  
XX  
PR 21-JAN-1997; 97US-0035663P.  
XX  
PR 01-JUL-1997; 97US-0051432P.  
XX  
PA (AXYS-) AXYS PHARM INC.  
XX  
PI Galvin M, Miller A, North M, Cardon L, Buckler A;  
PI Brooks-Wilson AR, Carey AH;  
XX  
DR WPI; 2000-505109/45.  
XX  
PT New nucleic acids other than naturally occurring chromosomes encoding  
PT ASTH1 protein, for e.g. screening compositions that modulate expression  
PT or function of ASTH1 proteins or as diagnostics for genetic  
PT predisposition to asthma.  
XX  
PS Example; Col 41-42; 131pp; English.  
XX  
CC The invention relates to the ASTH1 locus on the short arm of human  
CC chromosome (11p). This locus comprises the ASTH1I and ASTH1J genes, which  
CC are associated with a genetic predisposition to asthma and bronchial  
CC hyperreactivity. The ASTH1I and ASTH1J genes are oriented in opposite



XX





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PD 03-JUN-1999.
XX
PF 20-NOV-1998; 98WO-IB001890.
XX
PR 21-NOV-1997; 97FR-00014673.
PR 04-NOV-1998; 98US-0107078P.
XX
PA (GEST ) GENSET.
XX
PI Griffais R;
XX
DR WPI; 1999-357842/30.
XX
PT Genome sequence of Chlamydia pneumoniae.
XX
PS Page 1499; Disclosure; 1912pp; English.
XX
CC AAX91991-x97517 represent PCR primers used to amplify open reading frames
CC and other nucleic acid sequences from the genome of Chlamydia pneumoniae
CC (see AAX91990). C. pneumoniae causes respiratory disease such as
CC pneumonia and bronchitis and is thought to be a contributing factor in
CC heart disease, sarcoidosis, sinusitis, purulent otitis media, erythema
CC nodosum or pharyngitis. The polypeptides encoded by the open reading
CC frames of the C. pneumoniae genome (see AAY34584- AAY35879) can be used
CC in immunogenic compositions as vaccines. Vectors containing C. pneumoniae
CC nucleotides sequences can also be used as immunogenic compositions,
CC especially where the vector directs the expression of a neutralising
CC epitope of C. pneumoniae
XX
SQ Sequence 20 BP; 7 A; 4 C; 6 G; 3 T; 0 U; 0 Other;
Query Match 0.4%; Score 12; DB 1; Length 20;
Best Local Similarity 75.0%; Pred. No. 6.3e+03;
Matches 15; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
QY 2556 GGATGCTGGGCTCTGTTCTT 2575
Db 20 GGATAATCGCCTCGTCTT 1
RESULT 5521
AAA94525
ID AAA94525 standard; DNA; 20 BP.
XX
AC AAA94525;
XX
DT 09-JAN-2001 (first entry)
XX
DE Antisense oligonucleotide #20965 targeted to human G-alpha-S1.
XX
KW G-alpha-S1; infection; inflammation; tumour; antisense; human;
KW phosphorothioate; 2'-methoxyethyl; MOE; 5-methylcytidine;
KW Gs-alpha short form; ss.
XX
OS Homo sapiens.
FH Key Location/Qualifiers
FT modified_base 1..20 /*tag= a
FT /*mod_base= OTHER
FT /*note= "Optionally the internucleotide linkages are
FT phosphorothioate"
FT modified_base 1..5 /*tag= b
FT /*mod_base= OTHER
FT /*note= "Optionally the nucleotides are 2'-methoxyethyl
FT and cytidine residues are 5-methylcytidines"
FT modified_base 16..20 /*tag= c
FT /*mod_base= OTHER
FT /*note= "Optionally the nucleotides are 2'-methoxyethyl
FT and cytidine residues are 5-methylcytidines"
XX
PN US6110664-A.
XX
PD 29-AUG-2000.
XX
PF 25-JUN-1999; 99US-00344914.
XX
PR 25-JUN-1999; 99US-00344914.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Cowsert LM;
XX
DR WPI; 2000-586346/55.
XX
PT New antisense compounds for modulating the expression of G-alpha-S1,
PT especially useful for diagnostics, therapeutics and prophylaxis, e.g. to
PT prevent or delay infection, inflammation or tumor formation.
XX
PS Claim 3; Col 39; 37pp; English.
XX
CC The present invention relates to antisense compounds 8-30 bases long
CC targeted to a coding region, a stop codon, or a 3' untranslated region of
CC human G-alpha-S1 (see AAA94451). The antisense compounds specifically
CC hybridize with and inhibit the expression of human G-alpha-S1. The
CC antisense compounds are useful for diagnostics, therapeutics and
CC prophylaxis, e.g. to prevent or delay infection, inflammation or tumour
CC formation. Particularly, the antisense oligonucleotides are useful for
CC treating humans prone to a disease or condition associated with
CC expression of G-alpha-S1. The present sequence an antisense
CC oligonucleotide targeted to the 3' untranslated region of human G-alpha-
CC S1
XX
SQ Sequence 20 BP; 2 A; 2 C; 1 G; 15 T; 0 U; 0 Other;
Query Match 0.4%; Score 12; DB 1; Length 20;
Best Local Similarity 75.0%; Pred. No. 6.3e+03;
Matches 15; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
QY 2166 TTTTCTTTTCTTTTCTTTT 2185
Db 1 TTGTTCTTTTATTTCATT 20
RESULT 5522
AAA94526
ID AAA94526 standard; DNA; 20 BP.
XX
AC AAA94526;
XX
DT 09-JAN-2001 (first entry)
XX
DE Antisense oligonucleotide #20966 targeted to human G-alpha-S1.
XX
KW G-alpha-S1; infection; inflammation; tumour; antisense; human;
KW phosphorothioate; 2'-methoxyethyl; MOE; 5-methylcytidine;
KW Gs-alpha short form; ss.
XX
OS Homo sapiens.
FH Key Location/Qualifiers
FT modified_base 1..20 /*tag= a
FT /*mod_base= OTHER
FT /*note= "Optionally the internucleotide linkages are
FT phosphorothioate"
FT modified_base 1..5 /*tag= b
FT /*mod_base= OTHER
FT /*note= "Optionally the nucleotides are 2'-methoxyethyl
FT and cytidine residues are 5-methylcytidines"
FT modified_base 16..20 /*tag= c
FT /*mod_base= OTHER
```

PN XX WO200285308-A2.  
XX PD 31-OCT-2002.  
XX PF 23-APR-2002; 2002WO-US013135.  
XX PR 24-APR-2001; 2001US-0286137P.  
XX PA (EPIG-) EPIGENESIS PHARM INC.  
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX WPI; 2003-229219/22.  
XX  
PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
PS Disclosure; SEQ ID NO 5916; 872pp; English.  
XX  
CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of ubiquinone  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 13 A; 2 C; 1 G; 4 T; 0 U; 0 Other;  
  
Query Match 0.4%; Score 12; DB 1; Length 20;  
Best Local Similarity 75.0%; Pred. No. 6.3e+03;  
Matches 15; Conservative 0; Mismatches 5; Indels 0; Gaps 0;  
  
QY 2174 TTTTCTTTTAAAGATTG 2193  
Db 20 TTTCTTTTAAAGATTG 1  
  
RESULT 5519  
ABZ89594  
ID ABZ89594 standard; DNA; 20 BP.  
XX  
AC ABZ89594;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human oligonucleotide sequence.  
XX  
KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
OS Homo sapiens.  
XX

PN XX WO200285308-A2.  
XX PD 31-OCT-2002.  
XX PF 23-APR-2002; 2002WO-US013135.  
XX PR 24-APR-2001; 2001US-0286137P.  
XX PA (EPIG-) EPIGENESIS PHARM INC.  
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX WPI; 2003-229219/22.  
XX  
PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
PS Disclosure; SEQ ID NO 4836; 872pp; English.  
XX  
CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of ubiquinone  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 13 A; 0 C; 3 G; 4 T; 0 U; 0 Other;  
  
Query Match 0.4%; Score 12; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 6.3e+03;  
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 2786 AAAAAAAAAA 2797  
Db 1 AAAAAAAAAA 12  
  
RESULT 5520  
AAX92277/c  
ID AAX92277 standard; DNA; 20 BP.  
XX  
AC AAX92277;  
XX  
DT 13-SEP-1999 (first entry)  
XX  
DE PCR primer used to amplify an ORF of Chlamydia pneumoniae.  
XX  
KW Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis;  
KW sinusitis; purulent otitis media; erythema nodosum; pharyngitis; vaccine;  
KW neutralising epitope; PCR primer; ss.  
OS Synthetic.  
OS Chlamydomphila pneumoniae.  
XX  
PN WO9927105-A2.  
XX

CC aberrant insulin regulation or diabetes or a hyperproliferative disorder,  
CC particularly cancer. The antisense compounds are also useful for  
CC diagnostics, therapeutics, prophylaxis, e.g. to prevent or delay  
CC infection, inflammation or tumour formation, as research reagents and  
CC kits, and in distinguishing between functions of various members of a  
CC biological pathway. This polynucleotide sequence represents an  
CC oligonucleotide inhibitor of rat protein phosphatase 2 catalytic beta  
CC subunit mRNA levels of the invention. NOTE: This oligonucleotide contains  
CC phosphorothioate residues and has 2'- MOE wings with a deoxy gap  
XX  
SQ Sequence 20 BP; 0 A; 15 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 0.4%; Score 12; DB 1; Length 20;  
Best Local Similarity 75.0%; Pred. No. 6.3e+03;  
Matches 15; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 252 TCCCCCACCCTCTCCTCCGCC 271  
Db 1 TCCCCCGCGCGCTCCCCCGCC 20

RESULT 5516  
ABA97649  
ID ABA97649 standard; DNA; 20 BP.

XX ABA97649;  
AC  
XX 11-APR-2002 (first entry)  
DT  
XX probe t.  
DE  
XX ss; fluorochrome; nucleic acid probe; fluorescence.  
KW  
XX Unidentified.  
OS  
XX JP2001286300-A.  
PN

XX 16-OCT-2001.  
PD  
XX 20-APR-2000; 2000JP-00120097.  
PF  
XX 20-APR-1999; 99JP-00111601.  
PR 24-AUG-1999; 99JP-00236666.  
PR 30-AUG-1999; 99JP-00242693.  
PR 01-FEB-2000; 2000JP-00028896.

XX (BIOI-) BIOINDUSTRY KYOKAI SH.  
PA (KANK-) KANKYO ENG KK.  
PA (KEIZ-) KEIZAI SANGYOSHO SANGYO GIJUTSU SOGO KEN.  
XX WPI; 2002-134193/18.  
DR

XX Measurement of nucleic acids, using a nucleic acid probe and analysis of  
PT the obtained data.  
PT  
XX Example 6; Page 18; 34pp; Japanese.

XX This invention relates to a method for measuring nucleic acids using a  
CC nucleic acid probe labelled with a fluorochrome. The nucleic acid probe  
CC decreases the fluorescence of the fluorochrome when hybridised with a  
CC target nucleic acid, the decrease in the fluorescence is measured. The  
CC method can be used for measuring a target nucleic acid  
CC  
XX

SQ Sequence 20 BP; 14 A; 0 C; 1 G; 5 T; 0 U; 0 Other;

Query Match 0.4%; Score 12; DB 1; Length 20;  
Best Local Similarity 75.0%; Pred. No. 6.3e+03;  
Matches 15; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 1967 ATATTTACTTGAAAAAAG 1986  
Db 1 ATATATATATAAAAAAAG 20

RESULT 5517  
ABA97650  
ID ABA97650 standard; DNA; 20 BP.  
XX  
AC ABA97650;  
XX 11-APR-2002 (first entry)  
DT  
XX probe u.  
DE  
XX ss; fluorochrome; nucleic acid probe; fluorescence.

XX Unidentified.  
OS  
XX JP2001286300-A.  
PN

XX 16-OCT-2001.  
PD  
XX 20-APR-2000; 2000JP-00120097.  
PF  
XX 20-APR-1999; 99JP-00111601.  
PR 24-AUG-1999; 99JP-00236666.  
PR 30-AUG-1999; 99JP-00242693.  
PR 01-FEB-2000; 2000JP-00028896.

XX (BIOI-) BIOINDUSTRY KYOKAI SH.  
PA (KANK-) KANKYO ENG KK.  
PA (KEIZ-) KEIZAI SANGYOSHO SANGYO GIJUTSU SOGO KEN.  
XX WPI; 2002-134193/18.  
DR

XX Measurement of nucleic acids, using a nucleic acid probe and analysis of  
PT the obtained data.  
PT

XX Example 6; Page 18; 34pp; Japanese.

XX This invention relates to a method for measuring nucleic acids using a  
CC nucleic acid probe labelled with a fluorochrome. The nucleic acid probe  
CC decreases the fluorescence of the fluorochrome when hybridised with a  
CC target nucleic acid, the decrease in the fluorescence is measured. The  
CC method can be used for measuring a target nucleic acid  
CC  
XX

SQ Sequence 20 BP; 15 A; 0 C; 0 G; 5 T; 0 U; 0 Other;

Query Match 0.4%; Score 12; DB 1; Length 20;  
Best Local Similarity 75.0%; Pred. No. 6.3e+03;  
Matches 15; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 2782 ATTGAAAAAATAAAAAA 2801  
Db 1 ATATATATATAAAAAA 20

RESULT 5518  
ABZ90674/C  
ID ABZ90674 standard; DNA; 20 BP.

XX ABZ90674;  
AC  
XX 17-OCT-2003 (first entry)  
DT

XX Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.

XX

XX PD 19-JUN-2001.  
XX PF 17-DEC-1999; 99US-00467082.  
XX PR 17-DEC-1999; 99US-00467082.  
XX PA (ISIS-) ISIS PHARM INC.  
XX PI Monia BP, Cowsert LM;  
XX DR WPI; 2001-407321/43.  
XX PT Antisense oligonucleotides for inhibiting the expression of the human  
PT protein kinase A catalytic subunit C-alpha, particularly useful for  
PT preventing, delaying or treating infection, inflammation or tumor  
PT formation.  
XX PS Claim 1; Col 44; 35pp; English.  
XX CC The invention is directed to antisense compounds, particularly  
CC oligonucleotides which are targeted to a DNA encoding human protein  
CC kinase A (PKA) catalytic subunit C-alpha to modulate (inhibit) its  
CC expression. The antisense compounds are useful for diagnostics,  
CC therapeutics, prophylaxis and as research reagents or kits. The antisense  
CC oligonucleotides are useful for treating human, suspected of having or  
CC being prone to a disease or condition associated with the expression of  
CC PKA catalytic subunit C-alpha. In particular, the antisense  
CC oligonucleotides are useful for preventing, delaying or treating  
CC infection, inflammation and tumor formation. They are also useful in  
CC antisense therapy. The present sequence is a chimeric antisense  
CC oligonucleotide with a phosphorothioate backbone. This oligo is targeted  
CC to the start codon of human PKA catalytic subunit C-alpha to inhibit its  
CC expression  
XX SQ Sequence 20 BP; 0 A; 7 C; 12 G; 1 T; 0 U; 0 Other;  
  
Query Match 0.4%; Score 12; DB 1; Length 20;  
Best Local Similarity 75.0%; Pred. No. 6.3e+03;  
Matches 15; Conservative 0; Mismatches 5; Indels 0; Gaps 0;  
  
QY 476 CCGGCGCCGAGCCAGGA 495  
Db 20 CCGGCGCCGCGCCGCGCA 1  
  
RESULT 5514  
AAF54617  
ID AAF54617 standard; DNA; 20 BP.  
XX AAF54617;  
AC AAF54617;  
XX 03-APR-2001 (first entry)  
XX Human HLA Class I oligonucleotide probe SEQ ID NO: 62.  
DE Human; HLA typing; oligonucleotide array; Class I; gene discovery;  
KW expression; polymorphism detection; mapping; probe; PCR primer; ss.  
XX Homo sapiens.  
OS Homo sapiens.  
XX WO200079006-A1.  
PN 28-DEC-2000.  
PD 16-JUN-2000; 2000WO-US016722.  
XX 17-JUN-1999; 99US-0139843P.  
PR (HUTC-) HUTCHINSON CANCER RES CENT FRED.  
XX (UNIW ) UNIV WASHINGTON.  
PA Petersdorf EW, Guo Z, Hansen JA, Hood L;  
PI

XX WPI; 2001-102734/11.  
XX Oligonucleotide arrays useful for human leukocyte antigen (HLA) tissue  
PT typing, comprises HLA class I oligonucleotide probes representing all  
PT known polymorphisms in HLA class I locus, on a solid support.  
XX Disclosure; Page 61; 83pp; English.  
XX The present invention provides a microarray of oligonucleotides  
CC comprising probes for the human HLA Class I genes attached to a solid  
CC support. These can be used in HLA typing. Oligonucleotide arrays are also  
CC useful in large scale gene discovery, monitoring gene expression,  
CC polymorphism detection and gene mapping  
XX Sequence 20 BP; 2 A; 3 C; 12 G; 3 T; 0 U; 0 Other;  
SQ  
  
Query Match 0.4%; Score 12; DB 1; Length 20;  
Best Local Similarity 75.0%; Pred. No. 6.3e+03;  
Matches 15; Conservative 0; Mismatches 5; Indels 0; Gaps 0;  
  
QY 40 AAGCCCGCGCGCGGGG 59  
Db 1 AGGGCCTGTGCGTGAGGGG 20  
  
RESULT 5515  
ABT07491  
ID ABT07491 standard; DNA; 20 BP.  
XX ABT07491;  
AC ABT07491;  
XX 14-NOV-2002 (first entry)  
XX Rat protein phosphatase 2 oligo inhibitor SEQ ID No 105.  
DE Cytostatic; antidiabetic; antisense therapy; aberrant insulin regulation;  
KW protein phosphatase 2 catalytic beta subunit; antisense compound; cancer;  
KW hyperproliferative disorder; diabetes; inflammation; tumour; rat; ds.  
XX Rattus norvegicus.  
OS WO200264737-A2.  
XX 22-AUG-2002.  
PD 31-JAN-2002; 2002WO-US002805.  
PF 09-FEB-2001; 2001US-00780045.  
XX (ISIS-) ISIS PHARM INC.  
XX Monia BP, Wyatt JR;  
PI WPI; 2002-657588/70.  
XX New antisense oligonucleotides targeted to nucleic acid encoding Protein  
PT Phosphatase 2 catalytic subunit beta, useful for treating diseases  
PT related to Protein Phosphatase 2 catalytic subunit beta expression, such  
PT as cancer.  
XX Example 16; Page 98; 137pp; English.  
PS The invention relates to a novel compound 8-50 nucleotides in length  
XX targeted to a nucleic acid molecule encoding a protein phosphatase 2  
CC catalytic beta subunit, where the compound specifically hybridises with  
CC and inhibits the expression of protein phosphatase 2 catalytic beta  
CC subunits, or specifically hybridises with at least an 8-nucleotide  
CC portion of an active site on a nucleic acid molecule encoding a protein  
CC phosphatase 2 catalytic beta subunit. The antisense compounds are useful  
CC for modulating the expression of protein phosphatase 2 catalytic beta  
CC subunits and for treating diseases or conditions associated with  
CC expression of protein phosphatase 2 catalytic beta subunits, e.g.



PN US6248586-B1.

XX The present invention relates to murine oligonucleotides (ACC62754-  
CC ACC68806), which are associated with tumour suppression, tumour  
CC reversion, apoptosis and virus resistance. The oligonucleotides are  
CC useful as (1) as probes and primers for detecting, identifying,  
CC quantifying and/or amplifying nucleic acid, e.g. as one component of a  
CC gene chip; in vitro as (anti)sense reagents; and (2) for production of a  
CC recombinant polypeptides. The oligonucleotides are useful for preparation  
CC of pharmaceuticals for prevention and/or treatment of viral diseases that  
CC are characterised by development of tumours or cell degeneration,  
CC specifically cancer but also Alzheimer's disease and schizophrenia  
XX

SQ Sequence 17 BP; 1 A; 2 C; 1 G; 13 T; 0 U; 0 Other;  
Query Match 0.4%; Score 12; DB 1; Length 17;  
Best Local Similarity 100.0%; Pred. No. 5.6e+03;  
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2786 AAAAAAAAAA 2797  
Db 17 AAAAAAAAAA 6

RESULT 5510  
AAH00614/c  
ID AAH00614 standard; DNA; 20 BP.  
XX  
AC AAH00614;  
XX  
DT 24-JUL-2001 (first entry)  
XX  
DE Staphylococcus detection nucleotide sequence SEQ ID NO:605.  
XX  
KW Species specific; genus specific; family specific; probe; detection;  
KW identification; algal; archaeal; bacterial; fungal; parasitological;  
KW microorganism; diagnosis; translation elongation factor Tu; toxin;  
KW translation elongation factor G; RecA recombinase; resistance;  
KW catalytic subunit of proton-translocating ATPase; antimicrobial; vaccine;  
KW primer; ss.  
XX  
OS Staphylococcus sp.  
XX  
XX WO200123604-A2.  
PN  
XX  
PD 05-APR-2001.  
XX  
XX 28-SEP-2000; 2000WO-CA001150.  
PF  
XX 28-SEP-1999; 99CA-02283458.  
PR  
PR 19-MAY-2000; 2000CA-02307010.  
XX  
XX (INFE-) INFECTIO DIAGNOSTIC (IDI) INC.  
PA  
XX Bergeron MG, Boissinot M, Huletsky A, Menard C, Ouellette M;  
PI Picard FJ, Roy PH;  
PI  
XX WPI; 2001-245006/25.  
DR  
XX  
XX Nucleic acid sequences are used to generate universal probes and primers  
PT which can be used to identify and detect the presence of algal, archaeal,  
PT bacterial, fungal and parasitological species in a test sample.  
XX  
PS Claim 11; Page 756; 1580pp; English.  
XX

The present invention describes a method for generating a repertoire of  
CC nucleic acids of tuf, fus, atpD and/or recA genes from which probes  
CC and/or primers are derived. The method comprises amplifying the nucleic  
CC acids of determined algal, archaeal, bacterial, fungal and parasitological  
CC species with a combination of defined primer pairs. The method can be  
CC used for producing probes and/or primers for detecting one or more  
CC related microorganisms e.g. algae, archaea, bacteria, fungi and  
CC parasites, for universal detection and for specific and ubiquitous  
CC detection and identification of an algal, archaeal, bacterial, fungal and

CC parasitological species, genus, family and group. A nucleic acid (I) obtained  
CC using the method of the invention can be used for the universal detection  
CC of any bacterium, fungus or parasite in a sample and for the detection of  
CC at least one antimicrobial agent resistance gene or at least one toxin  
CC gene. hexA nucleic acids are used for the specific and ubiquitous  
CC detection and for identification of Streptococcus pneumoniae. (I) can be  
CC used to design a therapeutic agent which is effective against  
CC microorganisms. Microbial species or genus or family or phylum or group  
CC which can be detected include Abiotrophia adiacens, Bordetella sp.,  
CC Corynebacterium sp., Enterobacteriaceae group, Escherichia coli,  
CC Mycobacteriaceae family, Pseudomonads group, Streptococcus sp., Neisseria  
CC gonorrhoeae and Staphylococcus sp. Using DNA based tests provides faster  
CC results than substrate specificity tests as results can be determined in  
CC an hour and improved accuracy is also achieved. AAH00010 to AAH002304  
CC represent nucleotide sequences and primers/probes which are given in the  
CC exemplification of the present invention  
XX

SQ Sequence 20 BP; 7 A; 2 C; 3 G; 8 T; 0 U; 0 Other;  
Query Match 0.4%; Score 12; DB 1; Length 20;  
Best Local Similarity 75.0%; Pred. No. 6.3e+03;  
Matches 15; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 1245 AAGAATTCACAGAACTTCTC 1264  
Db 20 AATAATTACGGAACATTTC 1

RESULT 5511  
ABI94721  
ID ABI94721 standard; DNA; 20 BP.  
XX  
AC ABI94721;  
XX  
DT 16-FEB-2002 (first entry)  
XX  
DE Capture oligonucleotide Zip ID#1808 oligo #9.  
XX  
KW Human; K-ras; PCR primer; probe; capture probe; mutation detection;  
KW ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease;  
KW infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer;  
KW oncogene; tumour suppressor; human papillomavirus; forensic;  
KW environmental monitoring; food industry; feed industry; ss.  
XX  
OS Synthetic.  
XX  
XX WO200179548-A2.  
PN  
XX 25-OCT-2001.  
PD  
XX 04-APR-2001; 2001WO-US010958.  
PF  
XX 14-APR-2000; 2000US-0197271P.  
PR  
XX (CORR ) CORNELL RES FOUND INC.  
PA  
XX Barany F, Zirvi M, Gerry NP, Favis R, Kliman R;  
PI WPI; 2002-034366/04.  
XX  
XX Designing capture oligonucleotide probes for use on a support to which  
PT complementary oligonucleotides hybridize with little mismatch.  
PT  
XX Example 5; Fig 29; 300pp; English.  
PS  
XX The present invention describes a method (M1) for designing capture  
CC oligonucleotide probes (I) for use on a support to which complementary  
CC oligonucleotide probes (II) will hybridise with little mismatch, where  
CC (I) have melting temperatures within a narrow range. The method is useful  
CC for detecting infectious diseases caused by bacterial infectious agents  
CC e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal  
CC infectious agents e.g. Cryptococcus neoformans, Candida albicans and  
CC Aspergillus fumigatus, viruses e.g. T-cell lymphocytotrophic virus,

PT toxicological analysis, involves determining or comparing the expression  
PT levels of at least one endogenous gene.  
XX  
PS Example 3; Page 27; 77pp; English.  
XX  
CC The sequence represents a downstream PCR primer used in a DDRT-PCR  
CC experiment (and in cDNA synthesis), demonstrating the method of the  
CC invention. The method relates to evaluating a cellular response to an  
CC environmental compound, comprising determining or comparing the  
CC expression levels of at least one endogenous gene e.g by differential  
CC display of reverse transcribed mRNAs by PCR (DDRT-PCR). The method can be  
CC adapted to identify compounds that act on the level of endogenous gene  
CC expression through activating nuclear receptors. The method is useful in  
CC toxicological analysis, diagnostics, for diagnosing cancer (e.g.  
CC testicular, breast, prostate and endometrium), asthma, hypospadia,  
CC cryptorchism and/or allergy, and for evaluating the efficiency of a  
CC treatment for hormonal deficiency or hormonal replacement therapy, in a  
CC human such as a post-menopausal female. The method is also useful for  
CC identifying environmental chemicals or pharmaceutical compositions that  
CC interact with endocrine systems, and for detecting chemicals that pose a  
CC health threat. Expression levels of endogenous genes are determined  
CC rapidly using a sensitive technique, and the expression of any gene can  
CC be monitored. The assays are far more informative than the currently used  
CC assays, and significantly reduces the number of animals required for the  
CC testing, as it is expected that essentially all the animals in a test  
CC group will respond to the compound  
XX  
SQ Sequence 17 BP; 2 A; 3 C; 1 G; 11 T; 0 U; 0 Other;  
Query Match 0.4%; Score 12; DB 1; Length 17;  
Best Local Similarity 100.0%; Pred. No. 5.6e+03;  
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 2785 GAAAAAAAAA 2796  
Db 16 GAAAAAAAAA 5  
RESULT 5508  
AAS06657/c  
ID AAS06657 standard; DNA; 17 BP.  
XX  
AC AAS06657;  
XX  
DT 12-SEP-2001 (first entry)  
XX  
DE Human cDNA synthesis and differential display primer, HT11CT.  
XX  
KW Human; Estrogen response element; ERE; DDRT-PCR; ss; PCR primer;  
KW differential display of reverse transcribed mRNAs by PCR;  
KW testicular cancer; breast cancer; prostate cancer; endometrial cancer;  
KW asthma; hypospadia; cryptorchism; allergy; hormone replacement therapy;  
KW HRT; endocrine system; HT11CT.  
XX  
OS Homo sapiens.  
OS Synthetic.  
XX  
PN WO200134834-A2.  
XX  
PD 17-MAY-2001.  
XX  
PF 10-NOV-2000; 2000WO-DK000628.  
XX  
PR 11-NOV-1999; 99DK-00001626.  
XX  
PA (RIGS-) RIGSHOSPITALET.  
XX  
PI Leffers H, Jorgensen M, Skakkebaek NE;  
XX  
XX WPI; 2001-335941/35.  
DR  
XX Evaluating a cellular response to an environmental compound, for use in  
PT toxicological analysis, involves determining or comparing the expression

PT levels of at least one endogenous gene.  
XX Example 3; Page 27; 77pp; English.  
XX  
CC The sequence represents a downstream PCR primer used in a DDRT-PCR  
CC experiment (and in cDNA synthesis), demonstrating the method of the  
CC invention. The method relates to evaluating a cellular response to an  
CC environmental compound, comprising determining or comparing the  
CC expression levels of at least one endogenous gene e.g by differential  
CC display of reverse transcribed mRNAs by PCR (DDRT-PCR). The method can be  
CC adapted to identify compounds that act on the level of endogenous gene  
CC expression through activating nuclear receptors. The method is useful in  
CC toxicological analysis, diagnostics, for diagnosing cancer (e.g.  
CC testicular, breast, prostate and endometrium), asthma, hypospadia,  
CC cryptorchism and/or allergy, and for evaluating the efficiency of a  
CC treatment for hormonal deficiency or hormonal replacement therapy, in a  
CC human such as a post-menopausal female. The method is also useful for  
CC identifying environmental chemicals or pharmaceutical compositions that  
CC interact with endocrine systems, and for detecting chemicals that pose a  
CC health threat. Expression levels of endogenous genes are determined  
CC rapidly using a sensitive technique, and the expression of any gene can  
CC be monitored. The assays are far more informative than the currently used  
CC assays, and significantly reduces the number of animals required for the  
CC testing, as it is expected that essentially all the animals in a test  
CC group will respond to the compound  
XX  
SQ Sequence 17 BP; 2 A; 2 C; 1 G; 12 T; 0 U; 0 Other;  
Query Match 0.4%; Score 12; DB 1; Length 17;  
Best Local Similarity 100.0%; Pred. No. 5.6e+03;  
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 2785 GAAAAAAAAA 2796  
Db 16 GAAAAAAAAA 5  
RESULT 5509  
ACC64290/c  
ID ACC64290 standard; DNA; 17 BP.  
XX  
AC ACC64290;  
XX  
DT 01-JUL-2003 (first entry)  
XX  
DE Murine oligonucleotide associated with tumour suppression, SEQ ID 1537.  
XX  
KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine;  
KW tumour suppression; tumour reversion; apoptosis; virus resistance;  
KW viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;  
KW schizophrenia; ss.  
XX  
OS Mus musculus.  
XX  
PN WO2003025176-A2.  
XX  
PD 27-MAR-2003.  
XX  
PF 17-SEP-2002; 2002WO-IB004210.  
XX  
PR 17-SEP-2001; 2001FR-00011979.  
XX  
PA (MOLE-) MOLECULAR ENGINES LAB.  
XX  
PI Telerman A, Amson R, Tuijnder M;  
XX  
XX WPI; 2003-333167/31.  
XX  
XX New isolated nucleic acid, useful for treating viral diseases associated  
PT with tumors and cell degeneration, also related polypeptides, antibodies  
PT and transfected cells.  
XX  
PS Disclosure; Page 210; 738pp; French.



KW ss; crosslinking; dermatological; cosmetic; skin; hair; primer; PCR.  
XX Synthetic.  
OS  
PN WO2003082923-A1.  
XX  
XX  
PD 09-OCT-2003.  
XX  
XX 09-AUG-2002; 2002WO-JP008179.  
XX  
XX 03-APR-2002; 2002JP-00101185.  
PR (FUJI/) FUJIWARA H.  
XX  
XX Fujiwara H;  
PI  
XX WPI; 2003-853757/79.  
DR  
XX Treatment of tyrosine-containing polypeptides with phenol oxidase to  
PT produce crosslinking for control of hardness of polymers for industrial,  
PT cosmetic, or pharmaceutical use.  
XX  
XX Example 1; SEQ ID NO 2; 126pp; Japanese.  
PS  
XX The invention relates to a novel process for crosslinking polypeptides  
CC containing one or more tyrosine residues surrounded by amino acid  
CC residues which are electrically neutral and contain side-chains of low  
CC molecular weight (not more than 132 Da) by treating the polypeptides with  
CC a phenol oxidase. The process of the invention has dermatological  
CC activity. The method is useful for raising or lowering the hardness of a  
CC polymer by controlling the degree of crosslinking, and for industrial,  
CC cosmetic or medical purposes, e.g. for treatment of skin or hair. The  
CC present sequence is used in the exemplification of the invention.  
XX  
SQ Sequence 16 BP; 2 A; 2 C; 1 G; 11 T; 0 U; 0 Other;  
  
Query Match 0.4%; Score 12; DB 1; Length 16;  
Best Local Similarity 100.0%; Pred. No. 5.1e+03;  
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 2785 GAAAAAAAAAAAAA 2796  
Db 16 GAAAAAAAAAAAAA 5  
  
RESULT 5506  
ABK87931/c  
ID ABK87931 standard; DNA; 16 BP.  
AC ABK87931;  
XX  
XX 07-OCT-2002 (first entry)  
DT  
DE Anchored oligo-dT primer, H-T11G, used for differential display.  
XX  
KW Human; PCR; primer; H-T11G; ss; CC214; cervical cancer 2; HCCR-2;  
KW protooncogene; cytostatic; tumorigenesis; cervical cancer; cancer;  
KW leukaemia; lymphoma; antisense; gene therapy; carcinogen; anticancer;  
KW antioxidant.  
XX  
OS Synthetic.  
OS  
XX WO200244370-A1.  
PN  
XX  
XX 06-JUN-2002.  
PD  
XX  
XX 09-JUL-2001; 2001WO-KR001172.  
PF  
XX  
XX 28-NOV-2000; 2000KR-00071202.  
PR  
XX  
XX (KIMJ/) KIM J W.  
PA  
XX Kim JW;  
PI

XX WPI; 2002-557542/59.  
DR  
XX Novel human cervical cancer 2 protooncogene protein and polynucleotide  
PT encoding it useful for diagnosing various cancers e.g. leukemia, lymphoma  
PT or uterine cervix cancer, and for producing transformed animals.  
XX  
PS Disclosure; Page 47; 49pp; English.  
XX  
CC The invention discloses a human cervical cancer 2 (HCCR-2) protooncogene  
CC and encoded protein. The protooncogene was discovered using mRNA  
CC differential display, identifying it as being amplified in cancer cells  
CC and, more specifically, involved in the tumorigenesis of cervical  
CC cancer. HCCR-2 is useful for preventing, diagnosing or treating cancer,  
CC including leukaemia, lymphoma, colon, breast, kidney, stomach, lung,  
CC ovary or uterine cervix cancer. HCCR-2 is also useful for producing  
CC antibodies which are useful as diagnostic tools. HCCR-2 protooncogene is  
CC useful in the diagnosis of various cancers, in antisense gene therapy and  
CC for producing transformed animals which are useful in screening for  
CC carcinogens or anticancer agents, such as antioxidants. The protooncogene  
CC is also useful for establishing a continuous viable cancer cell line  
CC which is useful in searching for anticancer agents. The sequence  
CC presented is the anchored oligo-dT primer, H-T11G, which was used to  
CC amplify cDNA for differential display. This technique identified a cDNA  
CC fragment, designated CC214, which was then used as a probe to isolate the  
CC full length cDNA (cervical cancer 2 (HCCR-2) protooncogene) from a human  
CC lung embryonic fibroblast cDNA library  
XX  
SQ Sequence 16 BP; 2 A; 0 C; 2 G; 12 T; 0 U; 0 Other;  
  
Query Match 0.4%; Score 12; DB 1; Length 16;  
Best Local Similarity 100.0%; Pred. No. 5.1e+03;  
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 2786 AAAAAAAAAAAAAA 2797  
Db 15 AAAAAAAAAAAAAA 4  
  
RESULT 5507  
AAS06656/c  
ID AAS06656 standard; DNA; 17 BP.  
XX  
XX AAS06656;  
AC  
XX  
XX 12-SEP-2001 (first entry)  
DT  
XX Human cDNA synthesis and differential display primer, HT11CC.  
DE  
XX Human; Estrogen response element; ERE; DDRT-PCR; ss; PCR primer;  
KW differential display of reverse transcribed mRNAs by PCR;  
KW testicular cancer; breast cancer; prostate cancer; endometrial cancer;  
KW asthma; hypospadias; cryptorchism; allergy; hormone replacement therapy;  
KW HRT; endocrine system; HT11CC.  
XX  
OS Homo sapiens.  
OS Synthetic.  
XX  
XX WO200134834-A2.  
PN  
XX  
XX 17-MAY-2001.  
PD  
XX  
XX 10-NOV-2000; 2000WO-DK000628.  
PF  
XX  
XX 11-NOV-1999; 99DK-00001626.  
PR  
XX (RIGS-) RIGSHOSPITALET.  
XX  
XX Leffers H, Jorgensen M, Skakkebaek NE;  
PI  
XX WPI; 2001-335941/35.  
DR  
XX Evaluating a cellular response to an environmental compound, for use in  
PT



CC useful in the diagnosis of various cancers, in antisense gene therapy and  
CC for producing transformed animals which are useful in screening for  
CC carcinogens or anticancer agents, such as antioxidants. The protooncogene  
CC is also useful for establishing a continuous viable cancer cell line  
CC which is useful in searching for anticancer agents. The sequence  
CC presented is the anchored oligo-dT primer, H-T11C, which was used to  
CC amplify cDNA for differential display. This technique identified a cDNA  
CC fragment, designated CC214, which was then used as a probe to isolate the  
CC full length cDNA (cervical cancer 2 (HCCR-2) protooncogene) from a human  
CC lung embryonic fibroblast cDNA library

XX Sequence 16 BP; 2 A; 2 C; 1 G; 11 T; 0 U; 0 Other;

Query Match 0.4%; Score 12; DB 1; Length 16;  
Best Local Similarity 100.0%; Pred. No. 5.1e+03;  
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2785 GAAAAAATAAAA 2796  
|||||  
Db 16 GAAAAAATAAAA 5

RESULT 5503  
ABZ21815/c  
ID ABZ21815 standard; DNA; 16 BP.

XX AC ABZ21815;

XX DT 03-MAR-2003 (first entry)

XX DE Anti-cancer drug resistance related oligonucleotide #2.

XX KW Anti-cancer; drug resistance; lung cancer; head and neck cancer; ss.

XX OS Synthetic.

XX PN KR2002031530-A.

XX PD 02-MAY-2002.

XX PF 20-OCT-2000; 2000KR-00062030.

XX PR 20-OCT-2000; 2000KR-00062030.

XX PA (PHAR-) PHARMGENIA CO LTD.

XX PI Jun SH;

XX DR WPI; 2002-737801/80.

XX PT DNA sequences relating to anti-cancer drug resistance and the use  
XX thereof.

XX PS Disclosure; Page 4; 34pp; Korean.

XX The present invention describes DNA sequences relating to anti-cancer  
CC drug resistance. The DNA sequences can be used as a component of a kit or  
CC a DNA chip for detecting the presence of anti-cancer resistance. The  
CC method for identifying and sequencing the DNA sequences comprises  
CC obtaining an anti-cancer sensitive cancer tissue and an anti-cancer drug  
CC resistant cancer tissue from patients suffering from lung cancer and head  
CC and neck cancer, isolating mRNAs from the tissues, preparing cDNAs of the  
CC tissues from mRNAs using reverse transcriptase; finding genes showing the  
CC increase or decrease of gene expression in the cancer tissues before and  
CC after the anti-cancer drug treatment using differential display of  
CC polymerase chain reaction (PCR), subjecting the genes to electrophoresis,  
CC amplifying the cDNAs by using PCR, sub-cloning the amplified cDNAs into  
CC pGEM-Teasy plasmid, and sequencing the cDNA using an auto-sequencing  
CC machine. The present sequence represents an oligonucleotide which is used  
CC in the exemplification of the present invention

XX Sequence 16 BP; 2 A; 2 C; 1 G; 11 T; 0 U; 0 Other;

Query Match 0.4%; Score 12; DB 1; Length 16;  
Best Local Similarity 100.0%; Pred. No. 5.1e+03;  
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2785 GAAAAAATAAAA 2796  
|||||  
Db 16 GAAAAAATAAAA 5

RESULT 5504  
ABZ70966/c  
ID ABZ70966 standard; DNA; 16 BP.

XX AC ABZ70966;

XX DT 24-APR-2003 (first entry)

XX DE Human cervical cancer proto-oncogene 7 related PCR primer SEQ ID NO:3.

XX KW Human; cervical cancer proto-oncogene 7; HCC-7 proto-oncogene; cancer;  
XX cytostatic; vaccine; gene therapy; chromosome 5; PCR primer; ss.

XX OS Homo sapiens.

XX PN WO2003002743-A1.

XX PD 09-JAN-2003.

XX PF 27-JUN-2002; 2002WO-KR001226.

XX PR 28-JUN-2001; 2001KR-00037588.

XX PA (KIMJ/) KIM J W.

XX PI Kim JW;

XX DR WPI; 2003-201506/19.

XX PT New human cervical cancer proto-oncogene, useful for preparing a  
XX composition for preventing or treating cancer.

XX PS Example 2; Page 27; 28pp; English.

XX The present invention describes a human cervical cancer proto-oncogene 7  
CC (HCC-7 proto-oncogene). HCC-7 proto-oncogene is located on human  
CC chromosome 5. HCC-7 proto-oncogene has cytostatic activity and can be  
CC used in vaccines and gene therapy. HCC-7 proto-oncogene can be used for  
CC preparing a composition for preventing or treating cancer. The HCC-7  
CC protein expressed from the proto-oncogene is useful for producing an  
CC antibody for diagnosing cancer. The present sequence represents a PCR  
CC primer which is used in an example from the present invention

XX Sequence 16 BP; 2 A; 2 C; 1 G; 11 T; 0 U; 0 Other;

Query Match 0.4%; Score 12; DB 1; Length 16;  
Best Local Similarity 100.0%; Pred. No. 5.1e+03;  
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2785 GAAAAAATAAAA 2796  
|||||  
Db 16 GAAAAAATAAAA 5

RESULT 5505  
ADD26194/c  
ID ADD26194 standard; DNA; 16 BP.

XX AC ADD26194;

XX DT 15-JAN-2004 (first entry)

XX DE Primer relating to the invention H-T11C SEQ ID NO:2.

```
PF 16-AUG-2001; 2001WO-GB003650.
XX
PR 22-AUG-2000; 2000SE-00002973.
XX
PA (ASTR ) ASTRAZENECA AB.
PA (ASTR ) ASTRAZENECA UK LTD.
XX
PI Brodin P, Thelin A;
XX
DR WPI; 2002-269365/31.
XX
PT Use of a modulator of ADAMTS-1 ( a disintegrin and metalloproteinase) for
PT the treatment of obesity, insulin resistance syndrome (IRS), non-insulin
PT dependent diabetes mellitus (NIDDM) or atherosclerosis.
XX
PS Example 1; Page 39; 47pp; English.
XX
CC The invention relates to the use of modulators of A Disintegrin And
CC Metalloproteinase (ADAM) with Thrombospondin type 1 motif (ADAMTS-1)
CC which are used in the preparation of a medicament for the treatment of
CC obesity, insulin resistance syndrome (IRS), non-insulin dependent
CC diabetes mellitus (NIDDM) and atherosclerosis. The invention also relates
CC to methods for screening specific modulators of ADAMTS-1 activity. The
CC present sequence is a PCR primer used to determine the role of ADAMTS-1
CC in IRS, obesity, NIDDM and atherosclerosis
XX
SQ Sequence 16 BP; 2 A; 2 C; 1 G; 11 T; 0 U; 0 Other;

Query Match 0.4%; Score 12; DB 1; Length 16;
Best Local Similarity 100.0%; Pred. No. 5.1e+03;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2785 GAAAAAAAAA 2796
Db |||||
16 GAAAAAAAAA 5

RESULT 5501
ABK12622/c
ID ABK12622 standard; DNA; 16 BP.
XX
AC ABK12622;
XX
DT 18-JUN-2002 (first entry)
XX
DE Mouse E4 protein, PCR primer H-T11-C.
XX
KW Mouse; E4; insulin resistance syndrome; NIDDM; dyslipidaemia; obesity;
KW non-insulin dependent diabetes mellitus; atherosclerosis; primer; ss.
XX
OS Mus sp.
OS Synthetic.
XX
PN WO200218568-A2.
XX
PD 07-MAR-2002.
XX
PF 23-AUG-2001; 2001WO-GB003628.
XX
PR 28-AUG-2000; 2000US-0228117P.
PR 10-APR-2001; 2001US-0282496P.
XX
PA (ASTR ) ASTRAZENECA AB.
PA (ASTR ) ASTRAZENECA UK LTD.
XX
PI Brodin P, Thelin A;
XX
DR WPI; 2002-304254/34.
XX
PT New isolated polynucleotide encoding E4 gene involved in insulin
PT resistance syndrome, useful for identifying chemical compound useful for
PT controlling e.g. non-insulin dependent diabetes mellitus.
XX

Example 3; Page 19; 46pp; English.

The invention relates to an isolated polynucleotide (I) molecule
comprising a nucleotide sequence which encodes an E4 polypeptide (II) or
its fragment of at least 10 amino acids. (II) is useful for identifying a
chemical compound capable of modulating the activity of E4 by contacting
the chemical compound with (II) or a transgenic non-human mammal and
measuring any effect of chemical compound on the activity of (II) or
transgenic non-human mammal, where the identifying method is useful for
making a pharmaceutical composition, which comprises mixing the compound
thus identified with a carrier, and the compound is preferably an
antibody that is useful for controlling insulin resistance syndrome and
other related disorders such as non-insulin dependent diabetes mellitus
(NIDDM), dyslipidaemia, obesity, and atherosclerosis. The present
sequence represents a PCR primer used to isolate the coding sequence of
mouse E4 protein

Sequence 16 BP; 2 A; 2 C; 1 G; 11 T; 0 U; 0 Other;

Query Match 0.4%; Score 12; DB 1; Length 16;
Best Local Similarity 100.0%; Pred. No. 5.1e+03;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2785 GAAAAAAAAA 2796
Db |||||
16 GAAAAAAAAA 5

RESULT 5502
ABK87932/c
ID ABK87932 standard; DNA; 16 BP.
XX
AC ABK87932;
XX
DT 07-OCT-2002 (first entry)
XX
DE Anchored oligo-dT primer, H-T11C, used for differential display.
XX
KW Human; PCR; primer; H-T11C; ss; CC214; cervical cancer 2; HCCR-2;
KW protooncogene; cytostatic; tumorigenesis; cervical cancer; cancer;
KW leukaemia; lymphoma; antisense; gene therapy; carcinogen; anticancer;
KW antioxidant.
XX
OS Synthetic.
XX
PN WO200244370-A1.
XX
PD 06-JUN-2002.
XX
PF 09-JUL-2001; 2001WO-KR001172.
XX
PR 28-NOV-2000; 2000KR-00071202.
XX
PA (KIMJ/) KIM J W.
XX
PI Kim JW;
XX
DR WPI; 2002-557542/59.
XX
PT Novel human cervical cancer 2 protooncogene protein and polynucleotide
PT encoding it useful for diagnosing various cancers e.g. leukemia, lymphoma
PT or uterine cervix cancer, and for producing transformed animals.
XX
PS Example 1; Page 47; 49pp; English.
XX
CC The invention discloses a human cervical cancer 2 (HCCR-2) protooncogene
CC and encoded protein. The protooncogene was discovered using mRNA
CC differential display, identifying it as being amplified in cancer cells
CC and, more specifically, involved in the tumourigenesis of cervical
CC cancer. HCCR-2 is useful for preventing, diagnosing or treating cancer,
CC including leukaemia, lymphoma, colon, breast, kidney, stomach, lung,
CC ovary or uterine cervix cancer. HCCR-2 is also useful for producing
CC antibodies which are useful as diagnostic tools. HCCR-2 protooncogene is
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RESULT 5498  
ABK87149/c  
ID ABK87149 standard; DNA; 16 BP.  
XX  
AC  
XX  
DT 07-OCT-2002 (first entry)  
XX  
DE Scarlet runner bean anchor/reverse RT-PCR primer C.  
XX  
KW Expression cassette; promoter activity; suspensor cell; plant embryo;  
KW modulation of gene transcription; Scarlet runner bean; RT-PCR;  
KW reverse transcriptase-PCR; primer; transgenic; ss.  
XX  
OS Phaseolus coccineus.  
OS Synthetic.  
XX  
PN WO200244333-A2.  
XX  
PD 06-JUN-2002.  
XX  
PF 28-NOV-2001; 2001WO-US044737.  
XX  
PR 28-NOV-2000; 2000US-00724857.  
PR 28-NOV-2000; 2000US-0253672P.  
XX  
PA (REGC ) UNIV CALIFORNIA.  
PA (CERE-) CERES INC.  
XX  
PI Weterings K, Apuya NR, Tatarinova T, Goldberg RB;  
XX  
DR WPI; 2002-508506/54.  
XX  
PT Expression cassette comprises promoters with basal promoter activity  
PT operably linked to a heterologous polynucleotide, useful for expression  
PT genes in suspensor cells in plants and/or basal region of plant embryo.  
XX  
PS Example; Page 54; 114pp; English.  
XX  
CC The present invention relates to expression cassettes comprising a  
CC promoter sequence and a promoter polynucleotide with basal promoter  
CC activity, where the promoter sequence is operably linked to a  
CC heterologous polynucleotide, and when the expression cassette is inserted  
CC into a plant, the heterologous polynucleotide is specifically expressed  
CC in a suspensor cell and/or basal region of a plant embryo. The invention  
CC also provides polynucleotide sequences encoding Scarlet runner bean  
CC (Phaseolus coccineus) G564 and C541 proteins for use in the expression  
CC cassettes of the invention. The expression cassettes comprising promoters  
CC and promoter control elements are useful for modulating transcription of  
CC genes in a plant suspensor cell and/or basal region of a plant embryo.  
CC The present sequence represents an anchor/reverse reverse transcriptase  
CC (RT)-PCR primer used in the examples of the present invention  
XX  
SQ Sequence 16 BP; 2 A; 2 C; 1 G; 11 T; 0 U; 0 Other;  
Query Match 0.4%; Score 12; DB 1; Length 16;  
Best Local Similarity 100.0%; Pred. No. 5.1e+03;  
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 2785 GAAAAA AAAAAA 2796  
Db 16 GAAAAA AAAAAA 5  
RESULT 5499  
AAD34284/c  
ID AAD34284 standard; DNA; 16 BP.  
XX  
AC AAD34284;  
XX  
DT 16-JUL-2002 (first entry)

XX Mouse E2 cDNA amplifying PCR primer, H-T11-C.  
DE  
XX  
KW Mouse; metabolism; E2 gene; insulin resistance syndrome; dyslipidaemia;  
KW therapy; non-insulin dependent diabetes mellitus; NIDDM; antilipaemic;  
KW obesity; atherosclerosis; antiarteriosclerotic; anorectic; PCR; primer;  
KW ss.  
XX  
OS Mus sp.  
XX  
PN WO200218421-A2.  
XX  
PD 07-MAR-2002.  
XX  
PF 23-AUG-2001; 2001WO-GB003807.  
XX  
PR 28-AUG-2000; 2000US-0228118P.  
XX  
PA (ASTR ) ASTRAZENECA AB.  
PA (ASTR ) ASTRAZENECA UK LTD.  
XX  
PI Brodin P, Thelin A;  
XX  
DR WPI; 2002-329753/36.  
XX  
PT New E2 genes and proteins, useful for identifying or manufacturing agents  
PT for controlling insulin resistance syndrome or related disorders, e.g.  
PT non-insulin dependent diabetes mellitus, dyslipidemia or atherosclerosis.  
XX  
PS Example 3; Page 19; 52pp; English.  
XX  
CC The invention relates to the regulation of metabolism and in particular  
CC to a gene named E2 involved in insulin resistance syndrome. E2 gene and  
CC protein are useful for identifying therapeutic agents for controlling  
CC insulin resistance syndrome and other related disorders. They are  
CC particularly useful in manufacturing compositions or pharmaceutical for  
CC controlling the disorders. Particularly, the chemical compound or  
CC composition is useful for controlling insulin resistance syndrome and  
CC other related disorders, e.g. non-insulin dependent diabetes mellitus  
CC (NIDDM), dyslipidaemia, obesity or atherosclerosis. The present sequence  
CC is a PCR primer used to amplify mouse E2 cDNA  
XX  
SQ Sequence 16 BP; 2 A; 2 C; 1 G; 11 T; 0 U; 0 Other;  
Query Match 0.4%; Score 12; DB 1; Length 16;  
Best Local Similarity 100.0%; Pred. No. 5.1e+03;  
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 2785 GAAAAA AAAAAA 2796  
Db 16 GAAAAA AAAAAA 5  
RESULT 5500  
AAD32156/c  
ID AAD32156 standard; DNA; 16 BP.  
XX  
AC AAD32156;  
XX  
DT 18-JUN-2002 (first entry)  
XX  
DE H-T11-C PCR primer, to determine ADAMTS-1 role in IRS and obesity.  
XX  
KW A disintegrin and metalloproteinase with thrombospondin type 1 motif;  
KW ADAMTS-1; non-insulin dependent diabetes mellitus; ADAM; obesity; IRS;  
KW insulin resistance syndrome; NIDDM; atherosclerosis; PCR; primer; ss.  
XX  
OS Unidentified.  
XX  
PN WO200216632-A1.  
XX  
PD 28-FEB-2002.  
XX

PT actin promoter, useful for producing transgenic fruit-bearing plants.  
XX  
PS Example 1; Page 35; 72pp; English.  
XX  
CC The present sequence is a PCR primer which was used to isolate and  
CC amplify the promoter of the banana fruit-associated TRX (also known as  
CC the GlA) gene. This was isolated from a banana library using differential  
CC display analysis for banana-specific transcripts. The promoters of the  
CC invention can be used to produce transgenic fruit, with altered or  
CC improved characteristics, in particular their ripening, their nutritional  
CC content and the expression of useful proteins  
XX  
SQ Sequence 16 BP; 2 A; 2 C; 1 G; 11 T; 0 U; 0 Other;  
  
Query Match 0.4%; Score 12; DB 1; Length 16;  
Best Local Similarity 100.0%; Pred. No. 5.1e+03;  
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 2785 GAAAAAATAAAA 2796  
|||||  
Db 16 GAAAAAATAAAA 5  
  
RESULT 5496  
AAF83582/c  
ID AAF83582 standard; DNA; 16 BP.  
XX  
AC AAF83582;  
XX  
DT 23-JUL-2001 (first entry)  
XX  
DE B. gymnorhiza salt-tolerance cDNA amplifying primer H-T11C.  
XX  
KW Salt-stress; genetic modification; salt tolerance; PCR primer; ss.  
XX  
OS Bruguiera gymnorhiza.  
XX  
PN WO200130999-A1.  
XX  
PD 03-MAY-2001.  
XX  
PF 28-JUL-2000; 2000WO-JP005102.  
XX  
PR 22-OCT-1999; 99JP-00301621.  
PR 20-DEC-1999; 99JP-00361107.  
XX  
PA (EBAR ) EBARA CORP.  
XX  
PI Karube I, Hanagata N;  
XX  
DR WPI; 2001-308636/32.  
XX  
PT Nucleotide sequences, useful for generating salt-tolerant transgenic  
PT plants, obtained from the leaves of Bruguiera gymnorhiza subjected to  
PT 500 mM NaCl.  
XX  
PS Example 2; Page 15; 49pp; English.  
XX  
CC The invention provides nucleotide sequences highly expressed in salt-  
CC stressed leaves of Bruguiera gymnorhiza. The invention is useful to  
CC provide salt tolerant plants by genetic modification. Plants transformed  
CC with the DNA sequences have improved salt tolerance. Sequences AAF83580 -  
CC 592 represent PCR primers for amplifying B. gymnorhiza salt tolerance  
CC gene associated cDNA fragments  
XX  
SQ Sequence 16 BP; 2 A; 2 C; 1 G; 11 T; 0 U; 0 Other;

Query Match 0.4%; Score 12; DB 1; Length 16;  
Best Local Similarity 100.0%; Pred. No. 5.1e+03;  
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 2785 GAAAAAATAAAA 2796  
|||||  
Db 16 GAAAAAATAAAA 5

Db 16 GAAAAAATAAAA 5  
  
RESULT 5497  
AAS06650/c  
ID AAS06650 standard; DNA; 16 BP.  
XX  
AC AAS06650;  
XX  
DT 12-SEP-2001 (first entry)  
XX  
DE Human cDNA synthesis and differential display primer, HT11C.  
XX  
KW Human; Estrogen response element; ERE; DDRT-PCR; ss; PCR primer;  
KW differential display of reverse transcribed mRNAs by PCR;  
KW testicular cancer; breast cancer; prostate cancer; endometrial cancer;  
KW asthma; hypospadia; cryptorchism; allergy; hormone replacement therapy;  
KW HRT; endocrine system; HT11C.  
XX  
OS Homo sapiens.  
OS Synthetic.  
XX  
PN WO200134834-A2.  
XX  
PD 17-MAY-2001.  
XX  
PF 10-NOV-2000; 2000WO-DK000628.  
XX  
PR 11-NOV-1999; 99DK-00001626.  
XX  
PA (RIGS-) RIGSHOSPITALET.  
XX  
PI Jeffers H, Jorgensen M, Skakkebaek NE;  
XX  
DR WPI; 2001-335941/35.  
XX  
PT Evaluating a cellular response to an environmental compound, for use in  
PT toxicological analysis, involves determining or comparing the expression  
PT levels of at least one endogenous gene.  
XX  
PS Example 3; Page 27; 77pp; English.  
XX  
CC The sequence represents a downstream PCR primer used in a DDRT-PCR  
CC experiment (and in cDNA synthesis), demonstrating the method of the  
CC invention. The method relates to evaluating a cellular response to an  
CC environmental compound, comprising determining or comparing the  
CC expression levels of at least one endogenous gene e.g by differential  
CC display of reverse transcribed mRNAs by PCR (DDRT-PCR). The method can be  
CC adapted to identify compounds that act on the level of endogenous gene  
CC expression through activating nuclear receptors. The method is useful in  
CC toxicological analysis, diagnostics, for diagnosing cancer (e.g.  
CC testicular, breast, prostate and endometrium), asthma, hypospadia,  
CC cryptorchism and/or allergy, and for evaluating the efficiency of a  
CC treatment for hormonal deficiency or hormonal replacement therapy, in a  
CC human such as a post-menopausal female. The method is also useful for  
CC identifying environmental chemicals or pharmaceutical compositions that  
CC interact with endocrine systems, and for detecting chemicals that pose a  
CC health threat. Expression levels of endogenous genes are determined  
CC rapidly using a sensitive technique, and the expression of any gene can  
CC be monitored. The assays are far more informative than the currently used  
CC assays, and significantly reduces the number of animals required for the  
CC testing, as it is expected that essentially all the animals in a test  
CC group will respond to the compound  
XX  
SQ Sequence 16 BP; 2 A; 2 C; 1 G; 11 T; 0 U; 0 Other;

Query Match 0.4%; Score 12; DB 1; Length 16;  
Best Local Similarity 100.0%; Pred. No. 5.1e+03;  
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 2785 GAAAAAATAAAA 2796  
|||||  
Db 16 GAAAAAATAAAA 5





ID AAD30518 standard; DNA; 15 BP.  
XX  
AC AAD30518;  
XX  
DT 31-MAY-2002 (first entry)  
XX  
DE Oligonucleotide used to identify human EER-7 CDNA.  
XX  
KW Human; lysyl oxidase; LO gene; endothelial estrogen regulated gene; AAA;  
KW abdominal aortic aneurysms; EER-7 gene; myocardial infarction; elastin;  
KW fibrotic disease; gene therapy; cardiant; ss.  
XX  
OS Unidentified.  
XX  
PN WO200212470-A2.  
XX  
PD 14-FEB-2002.  
XX  
PF 08-AUG-2001; 2001WO-US024942.  
XX  
PR 08-AUG-2000; 2000US-0223763P.  
PR 15-DEC-2000; 2000US-0255838P.  
XX  
XX (AMHP ) AMERICAN HOME PROD CORP.  
PA  
PI Evans MJ; Scicchitano MS, Bapat AR, Beer E, Bhat RA, Ferris E;  
PI Mastroeni R, Zhang J, Karathanasis SK;  
XX  
DR WPI; 2002-227150/28.  
XX  
PT Novel isolated endothelial estrogen regulated gene protein comprising  
PT lysyl oxidase activity and conserved catalytic domain of lysyl oxidase,  
PT useful as target to treat abdominal aortic aneurysms, myocardial  
PT infarction.  
XX  
PS Example 1; Page 46; 68pp; English.  
XX  
CC The patent discloses novel lysyl oxidase (LO) genes, termed endothelial  
CC estrogen regulated (EER)-7 genes and their corresponding proteins. The  
CC invention also relates to an assay system to identify compounds that  
CC selectively modulate EER7 protein activity by interaction with estrogen  
CC receptors. Stimulation of LO enzyme activity of EER-7 acts as a target  
CC for abdominal aortic aneurysms (AAA) and myocardial infarctions. Increase  
CC in EER-7 lysyl oxidase activity increases elastin cross-linking in the  
CC inner elastic lamina which prevents development of aneurysms. Increased  
CC EER-7 is also useful to increase collagen cross-linkings which increase  
CC tensile strength of vessel wall which also prevents aneurysms. Myocardial  
CC infarction is prevented by inhibiting rupture of fibrous cap that covers  
CC plaque in the coronary vessels. Increased tensile strength of the cap,  
CC resulting from increased LO activity helps preventing the infarctions.  
CC Inhibition of LO activity is useful for treating fibrotic diseases.  
CC Stimulation of EER-7 proteins are useful for treating patients with  
CC estrogen-related disease states. Genetic variants of EER-7 can be  
CC detected to diagnose an EER-7 associated disease such as AAA or  
CC myocardial infarction. EER-7 polynucleotides are useful in gene therapy.  
CC The present DNA sequence is an oligonucleotide which is used to identify  
CC human EER-7 CDNA  
XX  
SQ Sequence 15 BP; 1 A; 2 C; 1 G; 11 T; 0 U; 0 Other;  
Query Match 0.4%; Score 12; DB 1; Length 15;  
Best Local Similarity 100.0%; Pred. No. 4.6e+03;  
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 2785 GAAAAA AAAAAA 2796  
Db 15 GAAAAA AAAAAA 4  
RESULT 5492  
AAT75138/c  
ID AAT75138 standard; DNA; 16 BP.  
XX

AC AAT75138;  
XX  
DT 03-MAR-1998 (first entry)  
XX  
DE Arbitrary anchor primer HC.  
XX  
KW dhc-1; homocysteine; hypohomocysteinaemia; atherosclerosis; diagnosis;  
KW serum; Dami cell; PCR; arbitrary primer; messenger RNA pool; ss.  
XX  
OS Synthetic.  
XX  
PN WO9725440-A2.  
XX  
PD 17-JUL-1997.  
XX  
PF 02-JAN-1997; 97WO-CA0000001.  
XX  
PR 03-JAN-1996; 96US-00582261.  
XX  
PA (HAMI-) HAMILTON CIVIC HOSPITALS RES DEV INC.  
XX  
PI Austin RC, Hirsh J, Weitz J;  
XX  
DR WPI; 1997-372877/34.  
XX  
PT Methods and polynucleotide(s) for diagnosing hyperhomocysteinaemia -  
PT and/or predisposition to develop premature atherosclerosis by detecting  
PT increased levels of serum homocysteine.  
XX  
PS Disclosure; Page 22; 84pp; English.  
XX  
CC Arbitrary RT-PCR primers (AAT75138-42) were used to amplify mRNA from  
CC cells exposed to hyperphysiological, normal or subphysiological levels of  
CC homocysteine. PCR products were separated on a sequencing gel and  
CC discrete fractions which were increased or decreased were identified.  
CC This method was used to identify mRNA and the corresponding cDNA which  
CC are increased in the cells of a patient having hyperhomocysteinaemia or a  
CC predisposition to homocysteine mediated atherosclerosis. These  
CC polynucleotides can be used for the diagnosis and treatment of  
CC atherosclerotic diseases and diseases of metabolism of sulphur containing  
CC amino acids (e.g. homocysteinaemia), which are associated with vascular  
CC damage and atherosclerotic disease, specifically unstable angina, acute  
CC myocardial infarction (heart attack), cerebrovascular accidents (stroke),  
CC hypertension, renal artery stenosis, aortic stenosis and deep vein  
CC occlusive disease  
XX  
SQ Sequence 16 BP; 2 A; 2 C; 1 G; 11 T; 0 U; 0 Other;  
Query Match 0.4%; Score 12; DB 1; Length 16;  
Best Local Similarity 100.0%; Pred. No. 5.1e+03;  
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 2785 GAAAAA AAAAAA 2796  
Db 16 GAAAAA AAAAAA 5  
RESULT 5493  
AAX19464/c  
ID AAX19464 standard; DNA; 16 BP.  
XX  
AC AAX19464;  
XX  
DT 21-MAY-1999 (first entry)  
XX  
DE Human senescence factor p23 H-T11 primer SEQ ID NO:6.  
XX  
KW Human; senescence factor; p23; cancer; persistent inflammation;  
KW proliferative disorder; degenerative disorder; primer; ss.  
XX  
OS Synthetic.  
OS Homo sapiens.  
XX

XX The invention relates to a composite binding polypeptide comprising a  
CC first natural binding domain derived from a first natural binding  
CC polypeptide and a second natural binding domain derived from a second  
CC natural binding polypeptide, where the first and second natural binding  
CC polypeptides may be the same or different and where the polypeptide binds  
CC to a target differing from the natural target of both the first and  
CC second binding polypeptides. The invention also relates to a chimeric  
CC polypeptide comprising a binding polypeptide cited above and a biological  
CC effector domain, a library of natural binding domains, a library of  
CC natural zinc finger nucleic acid binding domains comprising a linker  
CC attached to it, a method for selecting a binding polypeptide capable of  
CC binding to a target site and a method for designing a composite binding  
CC polypeptide. The methods and compositions of the present invention are  
CC useful for designing sequence-specific binding proteins for regulation of  
CC gene expression in the fields of molecular biology. They can also be used  
CC for the diagnosis and treatment of autoimmune disorders, and as research  
CC tools and in transgenic animals. This sequence represents human zinc  
CC finger binding motif DNA used in the scope of the invention  
XX  
SQ Sequence 29 BP; 0 A; 2 C; 4 G; 23 T; 0 U; 0 Other;

Query Match 0.4%; Score 12.2; DB 1; Length 29;  
Best Local Similarity 82.4%; Pred. No. 5.2e+03;  
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2786 AAAAAAAAAAAAAAAAAA 2802  
Db 29 AAAAAAAAAAACCAACA 13

RESULT 5489  
AAF81549/c  
ID AAF81549 standard; DNA; 15 BP.  
XX  
AC AAF81549;  
XX  
DT 05-JUN-2001 (first entry)  
XX  
DE Dye-labeled molecule removal method related oligonucleotide #1.  
XX  
KW Dye-labeled molecule removal; primer extension product purification;  
KW DNA sequencing; DNA analysis; ds.  
XX  
OS Synthetic.  
XX  
PN WO200125490-A1.  
XX  
PD 12-APR-2001.  
XX  
PF 05-OCT-2000; 2000WO-US027765.  
XX  
PR 06-OCT-1999; 99US-0158188P.  
PR 08-NOV-1999; 99US-0164050P.  
PR 03-MAY-2000; 2000US-00564117.  
XX  
PA (PROL-) PROLINX INC.  
XX  
PI Spicer DA, Hughes KA, Kaiser RJ, Mahoney JE, Springer AL;  
PI Stelowitz ML, Weissman CHD;  
XX  
WPI; 2001-245064/25.  
XX  
DR Removing unincorporated dye-labeled molecules associated with DNA  
XX sequencing, comprises using particles made of porous hydrophobic  
PT materials encapsulated in a hydrophilic matrix.  
PT  
XX  
PS Example 1; Page 23; 57pp; English.  
XX

XX The present invention describes a method of removing unincorporated dye-  
CC labeled molecules from a mixture of the molecules and polymers. This is  
CC useful in the purification of primer extension products, for example in  
CC DNA sequencing and analysis. The present sequence was used to demonstrate

CC the method of the invention  
XX  
SQ Sequence 15 BP; 1 A; 1 C; 1 G; 11 T; 0 U; 1 Other;  
Query Match 0.4%; Score 12; DB 1; Length 15;  
Best Local Similarity 92.3%; Pred. No. 4.6e+03;  
Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 2784 TGAIAAAAAAAAAA 2796  
Db 15 TNAIAAAAAAAAAA 3  
RESULT 5490  
AAH23587/c  
ID AAH23587 standard; DNA; 15 BP.  
XX  
AC AAH23587;  
XX  
DT 03-AUG-2001 (first entry)  
XX  
DE Dye-labeled dideoxy terminators removal related oligonucleotide #1.  
XX  
KW Dye-labeled dideoxy terminator; DNA sequencing;  
KW nucleic acid purification; hydrophilic polymeric matrix; ds.  
XX  
OS Synthetic.  
XX  
PN WO200125491-A1.  
XX  
PD 12-APR-2001.  
XX  
PF 06-OCT-2000; 2000WO-US027895.  
XX  
PR 06-OCT-1999; 99US-0158188P.  
PR 08-NOV-1999; 99US-0164050P.  
PR 03-MAY-2000; 2000US-00564117.  
XX  
PA (PROL-) PROLINX INC.  
XX  
PI Spicer DA, Hughes KA, Kaiser RJ, Mahoney JE, Springer AL;  
PI Stelowitz ML, Weissman CHD;  
XX  
WPI; 2001-316173/33.  
XX  
PT Removing unincorporated dye-labeled molecules from polymer incorporated  
PT with dye-labeled molecules, involves mixing and incubating the mixture  
PT with porous hydrophobic material entrapped within a hydrophilic matrix.  
XX  
PS Example 1; Page 23; 58pp; English.  
XX

XX The present invention describes a method for removing unincorporated dye-  
CC labeled molecules from a mixture comprising dye-labeled molecules and a  
CC polymer into which dye-labeled molecules are incorporated, involving  
CC contacting the mixture with particles of a porous hydrophobic material  
CC entrapped within a hydrophilic matrix, incubating the mixture and  
CC removing the particles, thus removing the absorbed unincorporated dye-  
CC labeled molecules. This is useful for removing fluorescent and other dye-  
CC labeled molecules following procedures such as PCR  
XX  
SQ Sequence 15 BP; 1 A; 1 C; 1 G; 11 T; 0 U; 1 Other;

Query Match 0.4%; Score 12; DB 1; Length 15;  
Best Local Similarity 92.3%; Pred. No. 4.6e+03;  
Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2784 TGAIAAAAAAAAAA 2796  
Db 15 TNAIAAAAAAAAAA 3

RESULT 5491  
AAD30518/c

PR 07-DEC-2001; 2001US-00008978.  
XX (NANO-) NANOSPHERE INC.  
XX  
PI Park S, Taton TA, Mirkin CA;  
XX  
DR WPI; 2003-430409/40.  
XX  
PT Detecting nucleic acid having two portions, by providing nanoparticles  
PT having oligonucleotides attached to it, contacting nucleic acid and  
PT nanoparticles to allow hybridization, and observing detectable change.  
XX  
PS Disclosure; Fig 68; 467pp; English.  
XX  
CC The invention relates to a method of detecting a nucleic acid having two  
CC portions. The method involves providing nanoparticles having  
CC oligonucleotides attached to it which has a sequence complementary to  
CC sequence of two portions of nucleic acid, contacting nucleic acid and  
CC nanoparticles to allow hybridisation of oligonucleotides with two or more  
CC portions of nucleic acid and observing a detectable change brought about  
CC by hybridisation. The method and aggregate probes are useful for  
CC detecting two or more nucleic acids (from a biological source) having at  
CC least two portions such as viral RNA, bacterial or fungal DNA, a gene  
CC associated with a disease, synthetic or structurally modified natural or  
CC synthetic RNA or DNA, or a product of a polymerase chain reaction  
CC amplification. The invention is useful for preparing a nanoprobe  
CC conjugate for detecting an analyte and for detecting a nucleic acid bound  
CC to an electrode surface. It is also useful for fabrication and for  
CC separating a selected nucleic acid having two portions from other nucleic  
CC acids. The present sequence is an oligo used to illustrate the method of  
CC the invention  
XX  
SQ Sequence 25 BP; 15 A; 3 C; 0 G; 7 T; 0 U; 0 Other;  
  
Query Match 0.4%; Score 12.2; DB 1; Length 25;  
Best Local Similarity 68.0%; Pred. No. 5.9e+03;  
Matches 17; Conservative 0; Mismatches 8; Indels 0; Gaps 0;  
  
QY 1981 AAAAGAGAAAGTGTGTATCTAGCTT 2005  
Db 1 AAAAGAGAAATCCTTATCAATATT 25  
  
RESULT 5487  
ACD18468  
ID ACD18468 standard; DNA; 29 BP.  
XX  
AC ACD18468;  
XX  
DT 25-AUG-2003 (first entry)  
XX  
DE Human zinc finger binding motif DNA #17.  
XX  
KW Composite binding polypeptide; zinc finger nucleic acid binding domain;  
KW autoimmune disorder; immunosuppressive; zinc finger binding motif; human;  
KW ss.  
XX  
OS Homo sapiens.  
XX  
PN WO200299084-A2.  
XX  
PD 12-DEC-2002.  
XX  
PF 04-APR-2002; 2002WO-US022272.  
XX  
PR 04-APR-2001; 2001GB-00008491.  
XX  
PA (SANG-) SANGAMO BIOSCIENCES INC.  
XX  
PI Moore M, Sepp A, Isalan M, Choo Y;  
XX  
DR WPI; 2003-278214/27.  
XX

PT New composite binding zinc finger polypeptide, useful for designing  
PT sequence-specific binding proteins regulating gene expression in the  
PT fields of molecular biology, and for the diagnosis and treatment of  
PT autoimmune disorders.  
XX  
PS Example 4; Page 121; 157pp; English.  
XX  
CC The invention relates to a composite binding polypeptide comprising a  
CC first natural binding domain derived from a first natural binding  
CC polypeptide and a second natural binding domain derived from a second  
CC natural binding polypeptide, where the first and second natural binding  
CC polypeptides may be the same or different and where the polypeptide binds  
CC to a target differing from the natural target of both the first and  
CC second binding polypeptides. The invention also relates to a chimeric  
CC polypeptide comprising a binding polypeptide cited above and a biological  
CC effector domain, a library of natural binding domains, a library of  
CC natural zinc finger nucleic acid binding domains comprising a linker  
CC attached to it, a method for selecting a binding polypeptide capable of  
CC binding to a target site and a method for designing a composite binding  
CC polypeptide. The methods and compositions of the present invention are  
CC useful for designing sequence-specific binding proteins for regulation of  
CC gene expression in the fields of molecular biology. They can also be used  
CC for the diagnosis and treatment of autoimmune disorders, and as research  
CC tools and in transgenic animals. This sequence represents human zinc  
CC finger binding motif DNA used in the scope of the invention  
XX  
SQ Sequence 29 BP; 23 A; 4 C; 2 G; 0 T; 0 U; 0 Other;  
  
Query Match 0.4%; Score 12.2; DB 1; Length 29;  
Best Local Similarity 82.4%; Pred. No. 5.2e+03;  
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
  
QY 2786 AAAAAGAAAAA 2802  
Db 1 AAAAAGAAAAACCAACA 17  
  
RESULT 5488  
ACD18467/c  
ID ACD18467 standard; DNA; 29 BP.  
XX  
AC ACD18467;  
XX  
DT 25-AUG-2003 (first entry)  
XX  
DE Human zinc finger binding motif DNA #16.  
XX  
KW Composite binding polypeptide; zinc finger nucleic acid binding domain;  
KW autoimmune disorder; immunosuppressive; zinc finger binding motif; human;  
KW ss.  
XX  
OS Homo sapiens.  
XX  
PN WO200299084-A2.  
XX  
PD 12-DEC-2002.  
XX  
PF 04-APR-2002; 2002WO-US022272.  
XX  
PR 04-APR-2001; 2001GB-00008491.  
XX  
PA (SANG-) SANGAMO BIOSCIENCES INC.  
XX  
PI Moore M, Sepp A, Isalan M, Choo Y;  
XX  
DR WPI; 2003-278214/27.  
XX  
PT New composite binding zinc finger polypeptide, useful for designing  
PT sequence-specific binding proteins regulating gene expression in the  
PT fields of molecular biology, and for the diagnosis and treatment of  
PT autoimmune disorders.  
XX  
PS Example 4; Page 121; 157pp; English.



CC cancer, oesophageal cancer, lung cancer, colorectal cancer, ovarian  
CC cancer, papillary bladder cancer, osteosarcoma, chondrosarcoma,  
CC liposarcoma, giant cell tumour, Ewing sarcoma, or other malignant tumours  
XX  
SQ Sequence 22 BP; 3 A; 3 C; 8 G; 8 T; 0 U; 0 Other;  
Query Match 0.4%; Score 12.2; DB 1; Length 22;  
Best Local Similarity 82.4%; Pred. No. 6.2e+03;  
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 790 CTGTCAGAGGAGCTGG 806  
Db 5 CTGTCAGTATTAGCTGG 21  
RESULT 5484  
AAC80383  
ID AAC80383 standard; DNA; 23 BP.  
XX  
AC AAC80383;  
XX  
DT 03-MAY-2001 (first entry)  
XX Forward primer #152 used for amplification of HLA-C exon 4.  
DE  
XX HLA-A; HLA-B; HLA-C; typing; primer; human; ss.  
KW  
XX Homo sapiens.  
OS Synthetic.  
XX  
PN WO200061795-A2.  
XX  
PD 19-OCT-2000.  
XX  
PF 05-APR-2000; 2000WO-EP002998.  
XX  
PR 09-APR-1999; 99EP-00870068.  
PR 11-JUN-1999; 99US-0138614P.  
XX  
PA (INNO-) INNOGENETICS NV.  
XX  
PI De Canck I, Rombout A, Rossau R;  
XX  
DR WPI; 2000-647426/62.  
XX Locus-specific, separate amplification of exon 2, exon 3, and/or exon 4  
PT of human leukocyte antigen (HLA)-A, HLA-B, or HLA-C alleles using defined  
PT primer sets, useful for subtyping or typing of HLA Class I alleles.  
XX  
PS Claim 4; Page 47; 128pp; English.  
XX The present invention relates to a method for the locus-specific,  
CC separate amplification of exon 2, exon 3, and/or exon 4 of human  
CC leukocyte antigen (HLA)-A, HLA-B, or HLA-C alleles. The method is useful  
CC for subtyping or typing of HLA class I alleles. The present sequence is  
CC an amplification primer used in the method.  
XX  
SQ Sequence 23 BP; 4 A; 5 C; 5 G; 6 T; 0 U; 3 Other;  
Query Match 0.4%; Score 12.2; DB 1; Length 23;  
Best Local Similarity 66.7%; Pred. No. 6.2e+03;  
Matches 14; Conservative 2; Mismatches 5; Indels 0; Gaps 0;  
QY 959 GTTCTCAGAGAGCCAAATCG 979  
Db 1 RTTCTCAGGATRGTCACATGG 21  
RESULT 5485  
AAQ43999/c  
ID AAQ43999 standard; DNA; 24 BP.  
XX  
AC AAQ43999;

XX 25-MAR-2003 (revised)  
DT 28-OCT-1993 (first entry)  
XX  
DE HIV-1 LTR region antisense oligonucleotide Dx.  
XX Purine; pyrimidine; tracts; therapeutic; diagnostic; control;  
KW gene expression; mRNA synthesis suppression;  
KW human immunodeficiency virus; ss.  
XX  
OS Synthetic.  
XX WO9312230-A1.  
PN  
XX  
PD 24-JUN-1993.  
XX  
PF 11-DEC-1992; 92WO-US010792.  
XX  
PR 13-DEC-1991; 91US-00808452.  
PR 21-JAN-1992; 92US-00826934.  
XX  
PA (STRI ) SRI INT.  
XX  
PI Jayasena SD, Johnston BH;  
XX  
DR WPI; 1993-214172/26.  
XX New oligo:nucleotide(s) forming triple helix with target nucleic acid -  
PT contain purine and pyrimidine tracts in specific orientations, useful  
PT therapeutically or diagnostically e.g. for inactivating HIV RNA, etc.  
XX  
PS Disclosure; Fig 12b; 101pp; English.  
XX The sequence is that of the antisense oligonucleotide Dx which is  
CC designed to target HIV-1 LTR region nucleotides 5786-8887. It may be  
CC useful for therapeutic or diagnostic control of gene expression, e.g.  
CC suppression of mRNA synthesis in the HIV-1 genome. When appropriately  
CC labelled it can also be used as a probe, and attachment of cleavage  
CC agents caused permanent inactivation of the target by site-specific  
CC cleavage. (Updated on 25-MAR-2003 to correct PN field.)  
XX  
SQ Sequence 24 BP; 0 A; 8 C; 0 G; 16 T; 0 U; 0 Other;  
Query Match 0.4%; Score 12.2; DB 1; Length 24;  
Best Local Similarity 82.4%; Pred. No. 6.1e+03;  
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 974 AAATCGAAAAATGGAGG 990  
Db 23 AAAAGGAAAAAAGGAGG 7  
RESULT 5486  
AAL61680  
ID AAL61680 standard; DNA; 25 BP.  
XX  
AC AAL61680;  
XX  
DT 22-SEP-2003 (first entry)  
XX  
DE Oligonucleotide #37 used in the nucleic acid detection method.  
KW Nucleic acid detection; fabrication; ss.  
XX Unidentified.  
XX WO2003035829-A2.  
PN  
XX  
PD 01-MAY-2003.  
XX  
PF 08-OCT-2002; 2002WO-US032088.  
XX  
PR 09-OCT-2001; 2001US-0327864P.

PF 20-JUL-1999; 99CN-00110801.  
XX  
PR 20-JUL-1999; 99CN-00110801.  
XX  
PA (HOSP-) HOSPITAL NO 458 CHINESE PLA.  
XX  
PI Kong X, Yi X, Zeng P;  
XX WPI; 2001-291394/31.  
DR  
XX  
XX Novel recombinant human hepatocyte auxin, its preparation and clinical application.  
PT  
XX  
PS Example 1; Page 2 (disclosure); 13pp; Chinese.  
XX  
CC The present invention describes a differential indication PCR (polymerase chain reaction) technique which is used to obtain a new complete gene able to promote the repair of damaged liver cells and with substance total length of 0.7 kb by screening the cDNA library of human foetal liver. The induction expression of engineering bacteria, the separation and cracking of inclusion body and the process for restoring and decontaminating proteins are built up to obtain high purity recombinant human hepatocyte auxin. It can externally promote the reproduction of primary culture liver cells and liver cancer cells BEL-7402 and internally promote the synthesis of mouse liver cell DNA after CCL4 is damaged and the repair of liver cells. The method may be used to treat serious hepatitis, chronic hepatitis, liver fibrosis and cirrhosis. The present sequence represents a primer which is used in the exemplification of the present invention  
CC  
XX  
SQ Sequence 22 BP; 2 A; 3 C; 5 G; 12 T; 0 U; 0 Other;  
  
Query Match 0.4%; Score 12.2; DB 1; Length 22;  
Best Local Similarity 82.4%; Pred. No. 6.2e+03;  
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
  
QY 1979 AAAAAAGAAAGTGTG 1995  
||||| ||||| ||  
Db 20 AAAAAAGAAAGCTTG 4  
  
RESULT 5482  
AAQ42237  
ID AAQ42237 standard; cDNA; 22 BP.  
XX  
AC AAQ42237;  
XX  
DT 25-MAR-2003 (revised)  
DT 13-SEP-1993 (first entry)  
XX  
DE PCR primer Gelo-19 used to mutagenise gelonin coding sequences.  
XX  
KW Type I ribosome-inactivating protein; ricin; momordin; immunconjugate;  
KW autoimmune disease; cell killing; toxin;  
KW Mutagenic polymerase chain reaction; ss.  
XX  
OS Synthetic.  
XX  
PN WO9309130-A1.  
XX  
PD 13-MAY-1993.  
XX  
PF 04-NOV-1992; 92WO-US009487.  
XX  
PR 04-NOV-1991; 91US-00787567.  
PR 19-JUN-1992; 92US-00901707.  
XX  
PA (XOMA ) XOMA CORP.  
XX  
PI Berhard SL, Better MD, Carroll SF, Lane JA, Lei SP;  
XX WPI; 1993-167617/20.  
DR  
XX

PT Analogues of type I ribosome inactivating protein - useful as cytotoxic agents, immuno toxins for treating auto immune diseases, cancer, graft versus host disease and selective cell killing in-vivo.  
PT  
XX Example 3; Page 33; 163pp; English.  
PS  
XX Fifteen analogues of gelonin were constructed. Ten non-cysteine residues in surface positions and available for conjugation to a second protein were targeted for substn. In the other analogues, one or both of the native Cys residues present in gelonin were substd. Overlap extension PCR was used to construct the various analogues. Primer gelo-19 was one of the synthetic oligonucleotides used in the mutagenic reactions. (Updated on 25-MAR-2003 to correct PN field.)  
CC  
XX  
SQ Sequence 22 BP; 5 A; 7 C; 5 G; 5 T; 0 U; 0 Other;  
  
Query Match 0.4%; Score 12.2; DB 1; Length 22;  
Best Local Similarity 82.4%; Pred. No. 6.2e+03;  
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
  
QY 2452 AGACATGGGATCCAATT 2468  
||||| ||||| |||||  
Db 2 AGCCATGGAATCCCAT 18  
  
RESULT 5483  
AAA12754  
ID AAA12754 standard; DNA; 22 BP.  
XX  
AC AAA12754;  
XX  
DT 25-JUL-2000 (first entry)  
XX  
DE 5' PCR primer for exon 7 of DNA encoding human TREX protein.  
XX  
KW Tumour necrosis factor receptor-associated Factor; TRAF;  
KW TRF-protein-interacting hereditary multiple extoses protein; TREX;  
KW signal modulator; tumour necrosis factor receptor;  
KW CD40 mediated signal transduction; TRAF protein; cancer;  
KW hereditary multiple extosis; autoimmune disease; PCR primer; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO200018959-A1.  
XX  
PD 06-APR-2000.  
XX  
PF 17-SEP-1999; 99WO-US021654.  
XX  
PR 17-SEP-1998; 98US-00156191.  
XX  
PA (UYCO ) UNIV COLUMBIA NEW YORK.  
XX  
PI Sato T;  
XX  
DR WPI; 2000-293180/25.  
XX  
PT New nucleic acid encoding Tumor necrosis factor Receptor-Associated Factor (TRAF) protein-interacting hereditary multiple extoses (TREX) protein, useful in the diagnosing cancer.  
PT  
XX  
PS Disclosure; Page 52; 161pp; English.  
XX  
CC PCR primers AAA12754-55 were used to amplify exon 7 of DNA encoding human tumour necrosis factor receptor-associated Factor (TRAF) protein-interacting hereditary multiple extoses (TREX) protein. TREX is a signal modulator which bridges between the tumour necrosis factor (TNF) receptor and CD40 mediated signal transduction. Anti-TREX antibodies are useful for treating an abnormality in a patient by inhibiting binding of a TREX protein and a TRAF protein (that is, TRAF 2, TRAF 3 or TRAF 5). The abnormality is cancer, a hereditary multiple extosis or an autoimmune disease. The cancer is colon cancer, gastric cancer, human head and neck squamous cell carcinoma, prostate carcinoma, breast cancer, thyroid

AAX77101/c  
ID AAX77101 standard; DNA; 22 BP.  
XX  
AC AAX77101;  
XX  
DT 03-AUG-1999 (first entry)  
XX  
DE GC6 gene 3' primer E.  
XX  
KW Cellular senescence; modulator; GC6 gene; senescent gene expression;  
KW pGC6; human; PCR primer; ss.  
XX  
OS Synthetic.  
OS Homo sapiens.  
XX  
PN WO9925878-A2.  
XX  
PD 27-MAY-1999.  
XX  
PF 19-NOV-1998; 98WO-US024996.  
XX  
PR 19-NOV-1997; 97US-00974180.  
XX  
PA (GERO-) GERON CORP.  
XX  
PI Funk W;  
XX  
DR WPI; 1999-347496/29.  
XX  
PT New human GC6 gene, useful for identifying agents for treating diseases  
PT and/or conditions associated with cell senescence.  
XX  
PS Disclosure; Page 12; 79pp; English.  
XX  
CC The invention relates to methods for modulating and identifying cellular  
CC senescence. Recombinant expression vectors comprising a recombinant  
CC polynucleotide corresponding to a polynucleotide in a human GC6 gene, are  
CC useful for altering senescent gene expression. The vectors and host cells  
CC comprising the vectors are useful for identifying agents that prevent or  
CC modulate senescent gene expression. The polynucleotides are useful for  
CC producing the protein, pGC6 and nucleic acid derivatives. The proteins  
CC encoded are useful for raising antibodies specific for pGC6, which are  
CC useful for isolating pGC6, and for detecting cells comprising pGC6 in  
CC complex cell mixtures. The characterization of the polynucleotides enable  
CC the identification of therapeutic agents that identify and distinguish  
CC between young and senescent cells. This enables treatment of aging  
CC diseases induced or exacerbated by cellular senescence  
XX  
SQ Sequence 22 BP; 2 A; 3 C; 5 G; 12 T; 0 U; 0 Other;  
Query Match 0.4%; Score 12.2; DB 1; Length 22;  
Best Local Similarity 82.4%; Pred. No. 6.2e+03;  
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 1979 AAAAAAGAAAGTGTG 1995  
DB 20 AAAAAAGAAAGCTTG 4  
RESULT 5480  
AAZ47346/c  
ID AAZ47346 standard; DNA; 22 BP.  
XX  
AC AAZ47346;  
XX  
DT 06-MAR-2000 (first entry)  
XX  
DE PCR primer E used in differential display analysis of Aspergillus oryzae.  
XX  
KW Dopa decarboxylase; DDC2; DDC3; increased yield; hormone; receptor;  
KW antibody; reporter; enzyme; polypeptide production; primer; ss.  
XX  
OS Synthetic.

OS Aspergillus oryzae.  
XX  
PN WO9960136-A1.  
XX  
PD 25-NOV-1999.  
XX  
PF 14-MAY-1999; 99WO-US010689.  
XX  
PR 15-MAY-1998; 98US-00079344.  
PR 15-MAY-1998; 98US-00079601.  
XX  
PA (NOVO ) NOVO NORDISK BIOTECH INC.  
PA (NOVO ) NOVO-NORDISK AS.  
XX  
PI Wahleithner J, Christensen T;  
XX  
DR WPI; 2000-062459/05.  
XX  
PT New isolated Aspergillus oryzae signaling sequences, used to increase the  
PT production of polypeptides by recombinant host filamentous fungal cells.  
XX  
PS Example 2; Page 35; 78pp; English.  
XX  
CC Sequences AAZ47342-Z47353 are oligo(dT12N2) primers used in the  
CC differential display analysis of the Aspergillus oryzae strains HC4.01  
CC and 27. The strains were analysed to find the genetic basis for phenotype  
CC differences in the strains which are used in a method for producing a  
CC polypeptide in an enhanced amount. The method involves cultivating a  
CC mutant of a parent filamentous fungal cell in suitable nutrient medium.  
CC The mutant cell contains the nucleotide sequence encoding the polypeptide  
CC to be synthesised and one or more second nucleotide sequences encoding a  
CC DDC polypeptide (see AAZ47338-Z47339). The mutant cell produces more of  
CC the polypeptide than the parent cell and the polypeptide can be recovered  
CC from the nutrient medium of the mutant cell. The method can be used for  
CC the production of polypeptides such as hormones, receptors, antibodies,  
CC reporters or enzymes, e.g. an aminopeptidase, amylase, carboxypeptidase,  
CC carboxypeptidase, catalase, cellulase, chitinase, cutinase, cyclodextrin  
CC glycosyltransferase, decarboxylase, esterase, alpha-galactosidase,  
CC beta-galactosidase, glucosylase, alpha-glucosidase, beta-glucosidase,  
CC invertase, laccase, lipase, mannosidase, mutanase, oxidase, pectinolytic  
CC enzyme, peroxidase, phytase, polyphenoloxidase, proteolytic enzyme,  
CC ribonuclease, transglutaminase or xylanase  
XX  
SQ Sequence 22 BP; 2 A; 3 C; 5 G; 12 T; 0 U; 0 Other;  
Query Match 0.4%; Score 12.2; DB 1; Length 22;  
Best Local Similarity 82.4%; Pred. No. 6.2e+03;  
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 1979 AAAAAAGAAAGTGTG 1995  
DB 20 AAAAAAGAAAGCTTG 4  
RESULT 5481  
AAH22189/c  
ID AAH22189 standard; DNA; 22 BP.  
XX  
AC AAH22189;  
XX  
DT 20-AUG-2001 (first entry)  
XX  
DE Human hepatocyte auxin related 3'-(T-rich) primer E.  
XX  
KW Human; hepatocyte; auxin; liver; hepatitis; chronic hepatitis;  
KW liver fibrosis; cirrhosis; liver damage; primer; ss.  
XX  
OS Homo sapiens.  
XX  
PN CN1280985-A.  
XX  
PD 24-JAN-2001.  
XX

Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1979 AAAAAAGAAAAGTGTG 1995  
| | | | | | | | | | | | | |  
Db 20 AAAAAAGAAAAGCTTG 4

RESULT 5477  
AAT28048/c  
ID AAT28048 standard; DNA; 22 BP.  
XX  
AC AAT28048;  
XX  
DT 31-DEC-1996 (first entry)  
XX  
DE 3'-primer E for human fibroblasts.  
XX  
KW Polymerase chain reaction; PCR; primer; amplify; human; fibroblast; AIDS;  
KW enhanced differential display; EDD; mRNA preparation; senescent cell;  
KW quiescent cell; dividing cell; senescence-related gene; gene expression;  
KW non-senescent cell; age-related lipofuscin; retina; therapy; liver spot;  
KW donor tissue; senescent melanocyte; melanin; hypopigmentation; ss.  
XX  
OS Synthetic.  
XX  
PN WO9613610-A2.  
XX  
PD 09-MAY-1996.  
XX  
PF 24-AUG-1995; 95WO-US011230.  
XX  
PR 31-OCT-1994; 94US-00332420.  
XX  
PA (GERO-) GERON CORP.  
XX  
PI Linskens MHK, Hirsch KS, Villeponteau B, Feng J, Funk W, West MD;  
XX WPI; 1996-251464/25.  
XX  
PT Identifying, isolating and regulating senescence-related genes - useful  
PT to ameliorate problems associated with accumulation of senescent cells,  
PT e.g. age-related lipofuscin accumulation in the retina and AIDS.  
XX  
PS Claim 6; Page 25; 135pp; English.  
XX  
CC AAT28044-T28075 represent primers for human fibroblasts in enhanced  
CC differential display (EDD), which is used in conjunction with the method  
CC of the invention. EDD is an mRNA preparation method. AAT28044-T28055  
CC represent T-rich 3'-primers, while AAT28056-T28075 are randomly selected  
CC 5'-primers used in EDD of human fibroblasts. The 3'-primers used are  
CC complementary to the poly-A tail of the mRNA. In the method of the  
CC invention, mRNA is isolated from a senescent cell, and a young quiescent  
CC cell, and the mRNAs are amplified in separate reaction mixtures. The  
CC amplified sequences are then separated by size or charge, and the  
CC products are analysed to identify a gene from young quiescent cells and  
CC dividing cells, that is present at a different level from senescent  
CC cells. The method can be used for the rapid and efficient identification  
CC and isolation of senescence-related genes and gene products, and to  
CC detect and distinguish between senescent and non-senescent cells. It can  
CC also be used to destroy cells expressing senescence specific (or related)  
CC gene products, and to screen for compounds capable of altering gene  
CC expression in senescent cells. The method can also be used to ameliorate  
CC problems associated with the accumulation of senescent cells such as age-  
CC related lipofuscin accumulation in the retina, and in the treatment of  
CC AIDS. Also, the method can be used to distinguish young cells from  
CC senescent cells in donor tissue, which is useful in removing senescent  
CC melanocytes overexpressing melanin which cause hypopigmentation, or liver  
CC spots  
XX  
SQ Sequence 22 BP; 2 A; 3 C; 5 G; 12 T; 0 U; 0 Other;

Query Match 0.4%; Score 12.2; DB 1; Length 22;  
Best Local Similarity 82.4%; Pred. No. 6.2e+03;

Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1979 AAAAAAGAAAAGTGTG 1995  
| | | | | | | | | | | | | |  
Db 20 AAAAAAGAAAAGCTTG 4

RESULT 5479

Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1979 AAAAAAGAAAAGTGTG 1995  
| | | | | | | | | | | | | |  
Db 20 AAAAAAGAAAAGCTTG 4

RESULT 5478  
AAT58488/c  
ID AAT58488 standard; DNA; 22 BP.  
XX  
AC AAT58488;  
XX  
DT 24-MAR-1997 (first entry)  
XX  
DE First primer #5 for use in enhanced differential display method.  
XX  
KW Differential Display; Enhanced Differential Display; EDD; screening;  
KW gene expression; cell type; different; cell development; gene typing;  
KW identification; differentiation; aging; and disease; primer; PCR; ss.  
XX  
OS Synthetic.  
XX  
PN US5580726-A.  
XX  
PD 03-DEC-1996.  
XX  
PF 29-APR-1994; 94US-00235180.  
XX  
PR 29-APR-1994; 94US-00235180.  
XX  
PA (GERO-) GERON CORP.  
XX  
PI Linskens MHK, Feng J, Villeponteau B, Funk W;  
XX WPI; 1997-033564/03.  
XX  
PT Detection of differentially expressed mRNA mols. - using two-step  
PT polymerase chain reaction amplification method.  
XX  
PS Claim 9; Col 15; 15pp; English.  
XX  
CC An improved method of Differential Display, named Enhanced Differential  
CC Display (EDD) has been designed as a technique for screening differences  
CC in gene expression between various cell types or between different stages  
CC of cell development. The technique is highly reproducible, leading to  
CC precise typing of the expressed genes in any given cell. EDD analysis  
CC permits the identification of novel genes involved in differentiation,  
CC aging and disease, and enables direct comparisons of different cell types  
CC and disease states. By using longer primers, and/or an alteration in the  
CC annealing temperatures, the number of false positives can be reduced.  
CC First, cDNA is prepared from total cellular RNA using 12 different 22-  
CC base oligonucleotides (AAT58484-95) that are targeted to the poly A tail  
CC of pol II mRNA transcripts. The last two bases of each primer varies so  
CC as to anchor the primer to the 3' end of different sets of mRNAs. A  
CC second set of 12 22-base oligo primers (AAT58472-83) is designed to  
CC randomly select a subset of cDNAs from each of the twelve 3' primers. PCR  
CC amplification of a subset of cDNAs is carried out in a two step process  
CC using particular 5' and 3' primers. The amplified gene products can then  
CC be directly sequenced or rapidly subcloned for DNA sequencing  
XX  
SQ Sequence 22 BP; 2 A; 3 C; 5 G; 12 T; 0 U; 0 Other;

Query Match 0.4%; Score 12.2; DB 1; Length 22;  
Best Local Similarity 82.4%; Pred. No. 6.2e+03;

Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1979 AAAAAAGAAAAGTGTG 1995  
| | | | | | | | | | | | | |  
Db 20 AAAAAAGAAAAGCTTG 4



CC permits the identification of novel genes involved in differentiation,  
CC aging and disease, and enables direct comparisons of different cell types  
CC and disease states. By using longer primers, and/or an alteration in the  
CC annealing temperatures, the number of false positives can be reduced.  
CC First, cDNA is prepared from total cellular RNA using 12 different 22-  
CC base oligonucleotides (AAT58484-95) that are targeted to the poly A tail  
CC of pol II mRNA transcripts. The last two bases of each primer varies so  
CC as to anchor the primer to the 3' end of different sets of mRNAs. A  
CC second set of 12 22-base oligo primers (AAT58472-83) is designed to  
CC randomly select a subset of cDNAs from each of the twelve 3' primers. PCR  
CC amplification of a subset of cDNAs is carried out in a two step process  
CC using particular 5' and 3' primers. The amplified gene products can then  
CC be directly sequenced or rapidly subcloned for DNA sequencing  
XX  
SQ Sequence 22 BP; 3 A; 3 C; 4 G; 12 T; 0 U; 0 Other;  
Query Match 0.4%; Score 12.2; DB 1; Length 22;  
Best Local Similarity 82.4%; Pred. No. 6.2e+03;  
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 1979 AAAAAAGAAAGTGTG 1995  
Db 20 AAAAAAGAAAGCTTG 4  
RESULT 5475  
AAZ47350/c  
ID AAZ47350 standard; DNA; 22 BP.  
XX  
AC AAZ47350;  
XX  
DT 06-MAR-2000 (first entry)  
DE PCR primer I used in differential display analysis of Aspergillus oryzae.  
XX Dopa decarboxylase; DDC2; DDC3; increased yield; hormone; receptor;  
KW antibody; reporter; enzyme; polypeptide production; primer; ss.  
XX  
OS Synthetic.  
OS Aspergillus oryzae.  
XX WO9960136-A1.  
XX  
PD 25-NOV-1999.  
XX  
PF 14-MAY-1999; 99WO-US010689.  
XX  
PR 15-MAY-1998; 98US-00079344.  
PR 15-MAY-1998; 98US-00079601.  
XX  
PA (NOVO ) NOVO NORDISK BIOTECH INC.  
PA (NOVO ) NOVO-NORDISK AS.  
XX  
PI Wahleithner J, Christensen T;  
XX WPI; 2000-062459/05.  
XX  
PT New isolated Aspergillus oryzae signaling sequences, used to increase the  
PT production of polypeptides by recombinant host filamentous fungal cells.  
XX  
XX Example 2; Page 35; 78pp; English.  
PS  
XX Sequences AAZ47342-Z47353 are oligo(dT12N2) primers used in the  
CC differential display analysis of the Aspergillus oryzae strains HC4.01  
CC and 27. The strains were analysed to find the genetic basis for phenotype  
CC differences in the strains which are used in a method for producing a  
CC polypeptide in an enhanced amount. The method involves cultivating a  
CC mutant of a parent filamentous fungal cell in suitable nutrient medium.  
CC The mutant cell contains the nucleotide sequence encoding the polypeptide  
CC to be synthesised and one or more second nucleotide sequences encoding a  
CC DDC polypeptide (see AAZ47338-247339). The mutant cell produces more of  
CC the polypeptide than the parent cell and the polypeptide can be recovered  
CC from the nutrient medium of the mutant cell. The method can be used for

CC the production of polypeptides such as hormones, receptors, antibodies,  
CC reporters or enzymes, e.g. an aminopeptidase, amylase, carbohydrazide,  
CC carboxypeptidase, catalase, cellulase, chitinase, cutinase, cyclodextrin  
CC glycosyltransferase, deoxyribonuclease, esterase, alpha-galactosidase,  
CC beta-galactosidase, glucoamylase, alpha-glucosidase, beta-glucosidase,  
CC invertase, laccase, lipase, mannosidase, mutanase, oxidase, pectinolytic  
CC enzyme, peroxidase, phytase, polyphenoloxidase, proteolytic enzyme,  
CC ribonuclease, transglutaminase or xylanase  
XX  
SQ Sequence 22 BP; 3 A; 3 C; 4 G; 12 T; 0 U; 0 Other;  
Query Match 0.4%; Score 12.2; DB 1; Length 22;  
Best Local Similarity 82.4%; Pred. No. 6.2e+03;  
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 1979 AAAAAAGAAAGTGTG 1995  
Db 20 AAAAAAGAAAGCTTG 4  
RESULT 5476  
AAH22193/c  
ID AAH22193 standard; DNA; 22 BP.  
XX  
AC AAH22193;  
XX  
DT 20-AUG-2001 (first entry)  
XX Human hepatocyte auxin related 3'-(T-rich) primer I.  
DE Human; hepatocyte; auxin; liver; hepatitis; chronic hepatitis;  
KW liver fibrosis; cirrhosis; liver damage; primer; ss.  
XX Homo sapiens.  
OS  
XX CN1280985-A.  
XX 24-JAN-2001.  
XX  
XX 20-JUL-1999; 99CN-00110801.  
XX 20-JUL-1999; 99CN-00110801.  
XX (HOSP-) HOSPITAL NO 458 CHINESE PLA.  
XX  
XX Kong X, Yi X, Zeng P;  
XX WPI; 2001-291394/31.  
XX Novel recombinant human hepatocyte auxin, its preparation and clinical  
XX application.  
XX Example 1; Page 2 (disclosure); 13pp; Chinese.  
XX  
XX The present invention describes a differential indication PCR (polymerase  
CC chain reaction) technique which is used to obtain a new complete gene  
CC able to promote the repair of damaged liver cells and with substance  
CC total length of 0.7 kb by screening the cDNA library of human foetal  
CC liver. The induction expression of engineering bacteria, the separation  
CC and cracking of inclusion body and the process for restoring and  
CC decontaminating proteins are built up to obtain high purity recombinant  
CC human hepatocyte auxin. It can externally promote the reproduction of  
CC primary culture liver cells and liver cancer cells BEL-7402 and  
CC internally promote the synthesis of mouse liver cell DNA after CCL4 is  
CC damaged and the repair of liver cells. The method may be used to treat  
CC serious hepatitis, chronic hepatitis, liver fibrosis and cirrhosis. The  
CC present sequence represents a primer which is used in the exemplification  
CC of the present invention  
XX  
SQ Sequence 22 BP; 3 A; 3 C; 4 G; 12 T; 0 U; 0 Other;  
Query Match 0.4%; Score 12.2; DB 1; Length 22;  
Best Local Similarity 82.4%; Pred. No. 6.2e+03;

cleavage structure in the presence of a target nucleic acid. The oligonucleotides comprise: (a) a first oligonucleotide having a 5' portion complementary to a first portion of a target nucleic acid and (b) a second oligonucleotide comprising a 5' portion complementary to a second portion of the target nucleic acid downstream of and contiguous to the first portion and a 3' portion. The 3' portion of the second oligonucleotide comprises a single 3' terminal nucleotide not complementary to the target nucleic acid. Additionally, the kit has a third oligonucleotide complementary to a third portion of the target nucleic acid upstream of the first portion of the first target nucleic acid. In detecting a target sequence, the oligonucleotides and endonuclease are mixed under conditions where an invasive cleavage structure is formed between the target sequence and the oligonucleotides if the target sequence is present in the sample, where the invasive cleavage structure is cleaved by the endonuclease to form a cleavage product. The composition is useful in detecting and characterizing specific nucleic acid sequences and sequence variants which can be used in detecting the presence of viral or bacterial infections, and other diseases such as cancer. The composition may also be used in forensic analysis or for paternity determinations. The sequence presented is a FEN -1 related DNA used within the scope of the invention.

Sequence 21 BP; 11 A; 3 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 12.2; DB 1; Length 21;  
Best Local Similarity 82.4%; Pred. No. 6.2e+03;  
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2780 GAATTGAAAAA 2796  
||||| ||||| |||||  
Db 1 GAATTCAAAAGAAAGA 17

RESULT 5473  
AAT28052/c  
ID AAT28052 standard; DNA; 22 BP.  
XX  
AC AAT28052;  
XX  
DT 31-DEC-1996 (first entry)  
XX  
DE 3'-primer J for human fibroblasts.  
XX  
KW Polymerase chain reaction; PCR; primer; amplify; human; fibroblast; AIDS;  
KW enhanced differential display; EDD; mRNA preparation; senescent cell;  
KW quiescent cell; dividing cell; senescence-related gene; gene expression;  
KW non-senescent cell; age-related lipofuscin; retina; therapy; liver spot;  
KW donor tissue; senescent melanocyte; melanin; hypopigmentation; ss.  
OS Synthetic.  
XX  
PN WO9613610-A2.  
XX  
PD 09-MAY-1996.  
XX  
PF 24-AUG-1995; 95WO-US011230.  
XX  
PR 31-OCT-1994; 94US-00332420.  
XX  
PA (GERO-) GERON CORP.  
XX  
PI Linskens MHK, Hirsch KS, Villeponteau B, Feng J, Funk W, West MD;  
XX WPI; 1996-251464/25.  
XX  
PT Identifying, isolating and regulating senescence-related genes - useful  
PT to ameliorate problems associated with accumulation of senescent cells,  
PT e.g. age-related lipofuscin accumulation in the retina and AIDS.  
XX  
PS Claim 6; Page 25; 135pp; English.  
XX  
CC AAT28044-T28075 represent primers for human fibroblasts in enhanced  
CC differential display (EDD), which is used in conjunction with the method

of the invention. EDD is an mRNA preparation method. AAT28044-T28055 represent T-rich 3'-primers, while AAT28056-T28075 are randomly selected 5'-primers used in EDD of human fibroblasts. The 3'-primers used are complementary to the poly-A tail of the mRNA. In the method of the invention, mRNA is isolated from a senescent cell, and a young quiescent cell, and the mRNAs are amplified in separate reaction mixtures. The amplified sequences are then separated by size or charge, and the products are analysed to identify a gene from young quiescent cells and dividing cells, that is present at a different level from senescent cells. The method can be used for the rapid and efficient identification and isolation of senescence-related genes and gene products, and to detect and distinguish between senescent and non-senescent cells. It can also be used to destroy cells expressing senescence specific (or related) gene products, and to screen for compounds capable of altering gene expression in senescent cells. The method can also be used to ameliorate problems associated with the accumulation of senescent cells such as age-related lipofuscin accumulation in the retina, and in the treatment of AIDS. Also, the method can be used to distinguish young cells from senescent cells in donor tissue, which is useful in removing senescent melanocytes overexpressing melanin which cause hypopigmentation, or liver spots

Sequence 22 BP; 3 A; 3 C; 4 G; 12 T; 0 U; 0 Other;

Query Match 0.4%; Score 12.2; DB 1; Length 22;  
Best Local Similarity 82.4%; Pred. No. 6.2e+03;  
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1979 AAAAAAGAAAAAGTGTG 1995  
||||| ||||| |||||  
Db 20 AAAAAAAGCTTG 4

RESULT 5474  
AAT58492/c  
ID AAT58492 standard; DNA; 22 BP.  
XX  
AC AAT58492;  
XX  
DT 24-MAR-1997 (first entry)  
XX  
DE First primer #9 for use in enhanced differential display method.  
XX  
KW Differential Display; Enhanced Differential Display; EDD; screening;  
KW gene expression; cell type; different; cell development; gene typing;  
KW identification; differentiation; aging; and disease; primer; PCR; ss.  
OS Synthetic.  
XX  
PN US5580726-A.  
XX  
PD 03-DEC-1996.  
XX  
PF 29-APR-1994; 94US-00235180.  
XX  
PR 29-APR-1994; 94US-00235180.  
XX  
PA (GERO-) GERON CORP.  
XX  
PI Linskens MHK, Feng J, Villeponteau B, Funk W;  
XX WPI; 1997-033564/03.  
XX  
PT Detection of differentially expressed mRNA mols. - using two-step  
PT polymerase chain reaction amplification method.  
XX  
PS Claim 9; Col 15; 15pp; English.  
XX

An improved method of Differential Display, named Enhanced Differential Display (EDD) has been designed as a technique for screening differences in gene expression between various cell types or between different stages of cell development. The technique is highly reproducible, leading to precise typing of the expressed genes in any given cell. EDD analysis





CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 2 A; 2 C; 2 G; 14 T; 0 U; 0 Other;

Query Match 0.4%; Score 12.2; DB 1; Length 20;  
Best Local Similarity 82.4%; Pred. No. 6.1e+03;  
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 1765 TTAAGCTTTTCTTTT 1781  
Db 1 TTAGGTTCTTTT 17

RESULT 5469  
AAZ99642/C  
ID AAZ99642 standard; DNA; 21 BP.  
AC AAZ99642;  
XX  
XX  
DT 12-JUL-2000 (first entry)  
DE Nucleotide sequence of G-motif oligonucleotide PZ332.  
XX  
KW G-motif oligonucleotide; vaccine; Toxoplasmosis; viral infection;  
KW antigen presenting cell activation; natural killer cell; septic shock;  
KW cytotoxic T-lymphocyte; inflammation; autoimmune disease;  
KW rheumatoid arthritis; Crohn's disease; sarcoidosis; multiple sclerosis;  
KW Kawasaki syndrome; graft-versus-host disease; transplant rejection;  
KW helper T cell response 1-mediated disease; Lyme arthritis;  
KW Streptococcal induced arthritis; chronic inflammatory bowel disease;  
KW psoriasis vulgaris; experimental allergic encephalomyelitis;  
KW insulin-dependent diabetes mellitus; bacterial infection;  
KW parasitic infection; Leishmaniasis; spontaneous abortion; tumour; ss.  
XX  
OS Synthetic.  
XX  
PN WO200014217-A2.  
XX  
PD 16-MAR-2000.  
XX  
PF 03-SEP-1999; 99WO-EP006502.  
XX  
PR 03-SEP-1998; 98EP-00116652.  
XX  
PA (CPGI-) CPG IMMUNOPHARMACEUTICALS GMBH.  
XX  
PI Wagner H, Lipford GB, Heeg K;  
XX  
DR WPI; 2000-256970/22.  
XX

XX Compositions comprising G-motif oligonucleotides useful for treating e.g.  
PT septic shock, rheumatoid arthritis, diabetes and human immunodeficiency  
PT virus infections.  
XX

PS Disclosure; Page 34; 75pp; English.  
XX

CC The present sequence represents a G-motif oligonucleotide of the  
CC invention. The specification describes compositions comprising G-motif  
CC oligonucleotides. The G-motif oligonucleotides inhibit activation of  
CC antigen presenting cells by inhibiting the uptake of DNA by a cell, by

CC stimulating natural killer cells, or by co-stimulating cytotoxic T-  
CC lymphocytes. The G-motif oligonucleotides may be used for the productions  
CC of vaccines for treating septic shock, inflammation, autoimmune diseases  
CC (e.g. rheumatoid arthritis, Crohn's disease, sarcoidosis, multiple  
CC sclerosis, Kawasaki syndrome, graft-versus-host disease and transplant  
CC rejection), helper T cell response 1-mediated diseases (e.g.  
CC Streptococcal induced arthritis, Lyme arthritis, chronic inflammatory  
CC bowel disease, psoriasis vulgaris, experimental allergic  
CC encephalomyelitis, and insulin-dependent diabetes mellitus), bacterial  
CC infections, parasitic infections (e.g. Leishmaniasis or Toxoplasmosis),  
CC viral infections (e.g. Cytomegalovirus and human immunodeficiency virus  
CC (HIV)-infections), spontaneous abortions and tumours. They may also be  
CC used to induce proliferation of bone marrow cells, especially macrophage  
CC precursor cells  
XX

SQ Sequence 21 BP; 2 A; 5 C; 0 G; 14 T; 0 U; 0 Other;

Query Match 0.4%; Score 12.2; DB 1; Length 21;  
Best Local Similarity 82.4%; Pred. No. 6.2e+03;  
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2782 ATTGAAAAAAAAAAAA 2798  
Db 21 ATAGGAAAAAAAAAATA 5

RESULT 5470  
AAF30891  
ID AAF30891 standard; DNA; 21 BP.  
XX  
AC AAF30891;  
XX  
XX  
DT 09-JUL-2001 (first entry)  
DE Mismatched target of ODN-MGB-LF conjugate.  
XX

KW ODN-MGB-LF; oligonucleotide; minor groove binder; latent fluorophore;  
KW hybridisation; detection; fluorescence; PCR primer; ss.  
XX  
OS Synthetic.  
XX

PN WO200131063-A1.  
XX

PD 03-MAY-2001.  
XX

PF 26-OCT-2000; 2000WO-US029786.  
XX

PR 26-OCT-1999; 99US-00428236.  
XX

PA (EPOC-) EPOCH BIOSCIENCES INC.  
XX

PI Dempcy RO, Afonina IA, Vermeulen NMJ;  
XX

DR WPI; 2001-328656/34.  
XX

PT Conjugate of oligonucleotide, minor groove binder and latent fluorophore,  
PT useful for detecting specific nucleic acids, e.g. for single-nucleotide  
XX mismatch discrimination.

PS Example 9; Page 78; 105pp; English.  
XX

CC The present sequence is that of a mismatched target sequence for an  
CC oligonucleotide (ODN)-minor groove binder (MGB)-latent fluorophore (LF)  
CC conjugate of the invention. It contains a single nucleotide mismatch to  
CC the ODN moiety of the conjugate, and was used to demonstrate the use of  
CC ODN-MGB-LF conjugates as primers in real-time PCR. The template was the  
CC 4518 bp pBK-CMV phagemid. The template contained a LacZ gene insert in  
CC which the region between nucleotides 1060 and 1083 was substituted with  
CC either the present mismatched target sequence, or with the matched target  
CC sequence given in AAF30890. Primers (see AAF30892-94) were chosen to  
CC produce a 42 bp amplicon. A strong fluorescence output was observed for  
CC the template with the perfectly-matched sequence, but only background  
CC fluorescence was observed for the template with the single-base mismatch



CC in vivo transformation and expression. They can thus be used for the  
CC delivery and expression of a therapeutic, immunological or immunogenic  
CC molecule (e.g., an antigen) and may also be used for eliciting an  
CC immunological response in a host organism. They are therefore useful in  
CC genetic vaccine compositions and for gene therapy, particularly where the  
CC use of retroviral vectors is unsafe or undesirable. Additionally, the  
CC retrotransposons may be used to generate transgenic animals, to detect  
CC the presence of *Candida* in a sample, to detect and disrupt genes, and to  
CC assign functions to nucleotide sequences. Sequences AA57968-A57981  
CC represent motifs within the *C. albicans* genome into which a TCA2  
CC retrotransposon was able to insert

XX SQ Sequence 20 BP; 15 A; 0 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 0.4%; Score 12.2; DB 1; Length 20;  
Best Local Similarity 82.4%; Pred. No. 6.1e+03;  
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2155 TTTTCTCTCTCTTTT 2171  
||||||| |||  
Db 17 TTTTCTCTCTCTATT 1

RESULT 5467  
AAH56423  
ID AAH56423 standard; DNA; 20 BP.

XX AC AAH56423;

XX DT 06-SEP-2001 (first entry)

XX DE *Escherichia coli* groE operon antisense oligonucleotide SEQ ID NO:71.

XX KW Antisense oligonucleotide; groE; groEL; groES; inhibitor; growth;  
XX KW microorganism; *Escherichia coli*; *Streptococcus pneumoniae*; diagnosis;  
XX KW *Streptococcus pyogenes*; *Staphylococcus aureus*; *Pseudomonas aeruginosa*;  
XX KW antibacterial; antiviral; antiproliferative; antisense therapy;  
XX KW microbial infection; ss.

XX OS *Escherichia coli*.

XX PN WO200136625-A2.

XX PD 25-MAY-2001.

XX PF 20-NOV-2000; 2000WO-CA001347.

XX PR 18-NOV-1999; 99US-0166249P.

XX PA (GENE-) GENESENSE TECHNOLOGIES INC.

XX PI Wright JA, Young AH, Dugourd D;

XX DR WPI; 2001-355633/37.

XX PT Novel antisense compounds targeting nucleic acid encoding groEL or groES  
PT gene of microorganism, which hybridize with and inhibit expression of the  
PT genes, useful to inhibit growth of microorganism having the genes.

XX PS Claim 3; Page 41; 110pp; English.

XX CC The present invention specifically claims AAH56368 to AAH56832 which are  
CC antisense oligonucleotides to nucleotide sequences encoding groE. More  
CC generally, antisense compounds (I) comprising antisense oligonucleotides  
CC of 5-50 bases targeted to a nucleotide sequence encoding groEL (heat  
CC shock protein (HSP)60) (GL) and groES (HSP10) (GS) gene from a  
CC microorganism, where the antisense compound is complementary to GL or GS  
CC of a microorganism and specifically hybridizes with and inhibits the  
CC expression of GL or GS, is claimed. (I) have antibacterial, antiviral and  
CC antiproliferative activities, and can be used in antisense therapy and  
CC for inhibition of expression of groES or groEL. (I) are useful for  
CC inhibiting expression of GL or GS in cells or tissues in vitro. (I) are  
CC also useful for inhibiting the growth of a microorganism, or inhibiting

CC the expression of GL or GS gene in a microorganism (a bacterial cell or a  
CC virus) having a GL or GS gene which involves administering to the  
CC microorganism or to a cell infected with the microorganism, (I). (I) are  
CC also useful for treating a mammalian pathological condition mediated by  
CC the microorganisms which involves identifying a eukaryotic organism  
CC having a pathological condition mediated by microorganisms having a GL or  
CC GS gene and administering (I) such that the growth of microorganism is  
CC inhibited. The antisense compounds are utilised for diagnostics,  
CC therapeutics, prophylaxis and as research reagents and kits, e.g., to  
CC prevent or delay microbial infections in humans. They are also useful as  
CC molecular weight markers. AAH56362 to AAH56367 and AAH56833 to AAH56854  
CC represent PCR primers for groE sequences which are used in the  
CC exemplification of the present invention. AAH56855 to AAH56870 represent  
CC groE nucleotide sequence given in the present invention

XX SQ Sequence 20 BP; 3 A; 4 C; 0 G; 13 T; 0 U; 0 Other;

Query Match 0.4%; Score 12.2; DB 1; Length 20;  
Best Local Similarity 82.4%; Pred. No. 6.1e+03;  
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2156 TTTTCTCTCTTTT 2172  
||||||| |||  
Db 1 TTTTCTCTCTTCA 17

RESULT 5468

ABZ90288

ID ABZ90288 standard; DNA; 20 BP.

XX AC ABZ90288;

XX DT 17-OCT-2003 (first entry)

XX DE Human oligonucleotide sequence.

XX KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
XX KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
XX KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
XX KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
XX KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
XX KW lung inflammation; respiratory disease; ds.

XX OS *Homo sapiens*.

XX PN WO200285308-A2.

XX PD 31-OCT-2002.

XX PF 23-APR-2002; 2002WO-US013135.

XX PR 24-APR-2001; 2001US-0286137P.

XX PA (EP-G-) EPIGENESIS PHARM INC.

XX PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;

XX DR WPI; 2003-229219/22.

XX PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.

XX PS Disclosure; SEQ ID NO 5530; 872pp; English.

XX CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an

CC prevent or delay microbial infections in humans. They are also useful as  
CC molecular weight markers. AAH56362 to AAH56367 and AAH56833 to AAH56854  
CC represent PCR primers for groE sequences which are used in the  
CC exemplification of the present invention. AAH56855 to AAH56870 represent  
CC groE nucleotide sequence given in the present invention  
XX  
SQ Sequence 20 BP; 3 A; 2 C; 1 G; 14 T; 0 U; 0 Other;

Query Match 0.4%; Score 12.2; DB 1; Length 20;  
Best Local Similarity 82.4%; Pred. No. 6.1e+03;  
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 2779 AGAATTGAAAAA 2795  
| | | | | | | | | | | | | | | | | | | | | |  
Db 17 AAAGTTGAAATATAAA 1

RESULT 5465  
ABZ89895/c  
ID ABZ89895 standard; DNA; 20 BP.  
XX  
AC ABZ89895;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human oligonucleotide sequence.  
XX  
KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
XX

OS Homo sapiens.  
XX  
PN WO200285308-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013135.  
XX  
PR 24-APR-2001; 2001US-0286137P.  
XX  
PA (EPIG-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
DR WPI; 2003-229219/22.  
XX

PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
PS Disclosure; SEQ ID NO 5137; 872pp; English.  
XX

CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or

CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences

XX  
SQ Sequence 20 BP; 12 A; 1 C; 3 G; 4 T; 0 U; 0 Other;  
Query Match 0.4%; Score 12.2; DB 1; Length 20;  
Best Local Similarity 82.4%; Pred. No. 6.1e+03;  
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 2172 TTTTTTTTTTTTTTTAA 2188  
| | | | | | | | | | | | | | | | | | | | | |  
Db 20 TTTTTTTTTTCCCTCAA 4

RESULT 5466  
AAA57980/c  
ID AAA57980 standard; DNA; 20 BP.  
XX  
AC AAA57980;  
XX  
DT 10-OCT-2000 (first entry)  
XX  
DE Candida albicans TCa2 retrotransposon insertion site, contig4-3072.  
XX  
KW Retrotransposon; pCal; TCa2; Ty1; copia; long terminal repeat; LTR;  
KW gag gene; group antigen; polyprotein; pol; aspartate protease; integrase;  
KW reverse transcriptase; RNaseH; pseudoknot; readthrough translation;  
KW stop codon suppression; gene delivery; gene therapy vector;  
KW genetic vaccine composition; immunogenic; transgenic animal;  
KW genomic insertion site; ds.  
XX

OS Candida albicans.  
XX  
PN WO200026397-A1.  
XX  
PD 11-MAY-2000.  
XX  
PF 01-NOV-1999; 99WO-NZ000179.  
XX  
PR 30-OCT-1998; 98CA-02249046.  
PR 30-OCT-1998; 98US-0106342P.  
XX  
PA (JANC ) JANSSEN PHARM NV.  
XX  
PI Luyten WHML, De Backer MD, Nelissen BJM, Poulter RTM;  
XX  
DR WPI; 2000-365640/31.  
XX

PT Novel retrotransposon expression vectors useful for expressing an  
PT antigen, epitope or therapeutic agent, or detecting genes or the presence  
PT of Candida in a sample.  
XX  
PS Example 19; Fig 69; 204pp; English.  
XX

CC The invention relates to novel retrotransposons from the yeast Candida  
CC albicans which have a copy number of 40-150, preferably 50-100 copies per  
CC genome. In particular, the invention relates to the novel C. albicans  
CC Ty1/copia retrotransposon pCal (AAA57920), and to the integrated form of  
CC this retrotransposon, designated TCa2, and to the novel C. albicans  
CC retrotransposons 1-28. pCal was initially isolated from C. albicans  
CC hOG1042 and has a copy number of 50-100 copies per cell. It comprises  
CC identical 280 bp long terminal repeats (LTRs) and two open reading frames  
CC (ORFs). The first ORF encodes a gag (group antigen) protein, and the  
CC second ORF encodes a polyprotein (pol) consisting of an aspartate  
CC protease, integrase, reverse transcriptase (RT) and RNaseH. The gag and  
CC pol ORFs of pCal are in the same reading frame, separated only by a  
CC termination codon (TGA). Translation of the pol ORF occurs through the  
CC occasional readthrough suppression of the stop codon, which is mediated  
CC by the formation of a pseudoknot within the gag-pol mRNA. The  
CC retrotransposons of the invention can be used as vectors for in vitro or

CC agents and diagnostic methods, as well as the characterisation of the  
CC differential efficacious responses to and side effects from  
CC pharmaceutical agents acting on a disease as well as other treatment.  
CC N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and  
CC 3367, are not actually given a sequence in the Sequence Listing from the  
CC present invention.  
XX Sequence 20 BP; 1 A; 8 C; 0 G; 11 T; 0 U; 0 Other;  
SQ Query Match 0.4%; Score 12.2; DB 1; Length 20;  
Best Local Similarity 82.4%; Pred. No. 6.1e+03;  
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1626 TACCTACCTTACTATT 1642  
Db 2 TTCCTTCCTTCCTATT 18

RESULT 5463  
ABQ84614  
ID ABQ84614 standard; DNA; 20 BP.  
XX ABQ84614;  
AC  
XX 20-FEB-2003 (first entry)  
DT  
XX DPP10 related PSQ assay oligonucleotide #99.  
DE  
XX DPP10; dipeptidyl peptidase; prollyloloigopeptidase; enzyme; asthma;  
KW antiinflammatory; antiasthmatic; antipsoriatic; antiarthritic;  
KW antirheumatic; vaccine; gene therapy; inflammatory disease;  
KW inflammatory bowel disease; atopy; rheumatoid arthritis; psoriasis;  
KW chromosome 2q14; PCR primer; ss.  
XX  
OS Synthetic.  
XX  
XX WO200286113-A2.  
PN  
PD  
XX 31-OCT-2002.  
XX  
XX 24-APR-2002; 2002WO-GB001887.  
XX  
XX 24-APR-2001; 2001GB-00010044.  
PR 24-APR-2001; 2001GB-00010046.  
PR 12-OCT-2001; 2001GB-00024575.  
PR 12-OCT-2001; 2001GB-00024594.  
XX  
XX (ISIS-) ISIS INNOVATIONS LTD.  
PA  
XX Cookson WOCM, Moffat MF, Allen M, Lench N;  
PI  
XX WPI; 2003-093132/08.  
DR  
XX New nucleic acid sequence comprising DPP10 mRNA, useful for the  
PT manufacture of a medicament for regulating DPP10 protein expression or  
PT for preventing or treating inflammatory disease e.g., inflammatory bowel  
PT disease.  
XX  
XX Disclosure; Page 321; 321pp; English.  
PS  
XX The present invention describes a new isolated nucleic acid sequence (I)  
CC comprising a DPP10 mRNA sequence. DPP10 is a dipeptidyl peptidase (also  
CC known as prollyloloigopeptidase). (I) has antiinflammatory, antiasthmatic,  
CC antipsoriatic, antiarthritic and antirheumatic activities, and can be  
CC used in vaccines and gene therapy. A composition comprising (I) can be  
CC used for the manufacture of a medicament for regulating DPP10 expression  
CC or for preventing or treating inflammatory disease e.g., inflammatory  
CC bowel disease, asthma, atopy, rheumatoid arthritis or psoriasis. (I) can  
CC also be used in an assay for detecting or measuring DPP10 in a sample. A  
CC host cell comprising (I) can be used for producing recombinant DPP10 gene  
CC products, or in drug screening systems to identify agents for diagnosis  
CC or treatment of individuals having or susceptible to inflammatory  
CC disease. Human DPP10 is located on chromosome 2, more specifically

CC chromosome 2q14. ABQ84254 to ABQ84612 and ABP55569 to ABP55629 represent  
CC sequences used in the exemplification of the present invention  
XX Sequence 20 BP; 11 A; 1 C; 5 G; 3 T; 0 U; 0 Other;  
SQ Query Match 0.4%; Score 12.2; DB 1; Length 20;  
Best Local Similarity 82.4%; Pred. No. 6.1e+03;  
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1980 AAAAAAGAAAAGTGTGT 1996  
Db 1 AAAATAGAAAAGTAGGT 17

RESULT 5464  
AAH56777/c  
ID AAH56777 standard; DNA; 20 BP.  
XX AAH56777;  
AC  
XX 06-SEP-2001 (first entry)  
DT  
XX S. aureus groE operon antisense oligonucleotide SEQ ID NO:425.  
DE  
XX Antisense oligonucleotide; groE; groEL; groES; inhibitor; growth;  
KW microorganism; Escherichia coli; Streptococcus pneumoniae; diagnosis;  
KW Streptococcus pyogenes; Staphylococcus aureus; Pseudomonas aeruginosa;  
KW antibacterial; antiviral; antiproliferative; antisense therapy;  
KW microbial infection; ss.  
XX  
OS Staphylococcus aureus.  
XX  
PN WO200136625-A2.  
XX  
PD 25-MAY-2001.  
XX  
XX 20-NOV-2000; 2000WO-CA001347.  
PF  
XX 18-NOV-1999; 99US-0166249P.  
XX  
XX (GENE-) GENESENSE TECHNOLOGIES INC.  
PA  
XX Wright JA, Young AH, Dugourd D;  
PI  
XX WPI; 2001-355633/37.  
XX  
XX Novel antisense compounds targeting nucleic acid encoding groEL or groES  
PT gene of microorganism, which hybridize with and inhibit expression of the  
PT genes, useful to inhibit growth of microorganism having the genes.  
XX  
XX Claim 3; Page 53; 110pp; English.  
PS  
XX The present invention specifically claims AAH56368 to AAH56832 which are  
CC antisense oligonucleotides to nucleotide sequences encoding groE. More  
CC generally, antisense compounds (I) comprising antisense oligonucleotides  
CC of 5-50 bases targeted to a nucleotide sequence encoding groEL (heat  
CC shock protein (HSP)60) (GL) and groES (HSP10) (GS) gene from a  
CC microorganism, where the antisense compound is complementary to GL or GS  
CC of a microorganism and specifically hybridises with and inhibits the  
CC expression of GL or GS, is claimed. (I) have antibacterial, antiviral and  
CC antiproliferative activities, and can be used in antisense therapy and  
CC for inhibition of expression of groES or groEL. (I) are useful for  
CC inhibiting expression of GL or GS in cells or tissues in vitro. (I) are  
CC also useful for inhibiting the growth of a microorganism, or inhibiting  
CC the expression of GL or GS gene in a microorganism (a bacterial cell or a  
CC virus) having a GL or GS gene which involves administering to the  
CC microorganism or to a cell infected with the microorganism, (I). (I) are  
CC also useful for treating a mammalian pathological condition mediated by  
CC the microorganisms which involves identifying a eukaryotic organism  
CC having a pathological condition mediated by microorganisms having a GL or  
CC GS gene and administering (I) such that the growth of microorganism is  
CC inhibited. The antisense compounds are utilised for diagnostics,  
CC therapeutics, prophylaxis and as research reagents and kits, e.g., to



PT mutation(s) in alpha-mannosidase gene, also nucleic acid encoding the  
PT enzyme and derived oligo:nucleotide primers.  
XX Example 2; Page 22; 85pp; English.  
XX  
CC Forward primer mp5UT1F is based on a 1500 bp amplicon produced from  
CC bovine fibroblast genomic DNA using primers (see AAT91098-99) based on  
CC the bovine alpha-mannosidase (LAMAN) gene (see AAT91086). It was used  
CC with reverse primer mp262 (see AAT91101) to obtain an 800 bp RT-PCR  
CC product that constituted a 5' part of LAMAN cDNA. This was combined with  
CC a previously obtained PCR cDNA fragment (see AAT91096-97) to produce a  
CC full-length clone (see AAT91086) for LAMAN (see AAW26682). Mutations in  
CC the LAMAN gene cause bovine alpha-mannosidosis, and can be detected using  
CC claimed PCR primers (see AAT91088-93)  
XX  
SQ Sequence 20 BP; 2 A; 5 C; 11 G; 2 T; 0 U; 0 Other;

Query Match 0.4%; Score 12.2; DB 1; Length 20;  
Best Local Similarity 82.4%; Pred. No. 6.1e+03;  
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 434 CTGCACCCAGCGCGGCC 450  
Db 19 CTGCAGCGCGCGCGGCC 3

RESULT 5461  
ABZ90451/C  
ID ABZ90451 standard; DNA; 20 BP.  
XX  
AC ABZ90451;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human oligonucleotide sequence.  
XX  
KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
XX  
OS Homo sapiens.  
XX  
PN WO200285308-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013135.  
XX  
PR 24-APR-2001; 2001US-0286137P.  
XX  
PA (EPIG-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
DR WPI; 2003-229219/22.  
XX

PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
PS Disclosure; SEQ ID NO 5693; 872pp; English.  
XX

CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an

CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of ubiquinone or  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX

SQ Sequence 20 BP; 3 A; 12 C; 4 G; 0 T; 0 U; 1 Other;

Query Match 0.4%; Score 12.2; DB 1; Length 20;  
Best Local Similarity 77.8%; Pred. No. 6.1e+03;  
Matches 14; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
QY 634 GGATGCCCGCGGCGCTGGC 651  
Db 18 GGNTGGCTCGGGCGCTGGC 1

RESULT 5462  
AAZ70845  
ID AAZ70845 standard; DNA; 20 BP.  
XX  
AC AAZ70845;  
XX  
DT 10-SEP-2001 (first entry)  
XX  
DE Human biallelic marker upstream amplification primer SEQ ID NO:5201.  
XX  
KW Human genome; biallelic marker; high density disequilibrium map;  
KW genomic map; haplotype; phenotype; polymorphic base; genotyping;  
KW haplotyping; hybridisation; identification; characterisation;  
KW amplification; single nucleotide polymorphism; SNP; PCR primer;  
KW diagnosis; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO9954500-A2.  
XX  
PD 28-OCT-1999.  
XX  
PF 21-APR-1999; 99WO-IB000822.  
XX  
PR 21-APR-1998; 98US-0082614P.  
PR 23-NOV-1998; 98US-0109732P.  
XX  
PA (GEST ) GENSET.  
XX  
PI Cohen D, Blumenfeld M, Chumakov I;  
XX  
DR WPI; 2000-013267/01.  
XX

PT Novel biallelic markers used to construct a high density disequilibrium  
PT map of the human genome.  
XX  
PS Claim 8; Page 1340; 2745pp; English.  
XX

CC AAZ65654 to AAZ69578 represent human biallelic markers from the present  
CC invention, which contain a polymorphic base at position 24 of their  
CC nucleotide sequences. AAZ69579 to AAZ77440 represent amplification  
CC primers for the biallelic markers. The biallelic markers of the invention  
CC have a variety of uses: they can be used for high density mapping of the  
CC human genome, and in complex association studies and haplotyping studies  
CC which are useful in determining the genetic basis for disease states.  
CC Compositions and methods of the invention can also be useful for the  
CC identification of the targets for the development of pharmaceutical



XX PS Example 1; Page 239; 408pp; English.

XX CC The present invention describes a method for treating a proliferative

CC skin or eye disease and scarring. The method involves administering a

CC ribozyme (I) which cleaves RNA encoding a cytokine involved in

CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle

CC dependent kinase, growth factor or a reductase, or administering a

CC nucleic acid molecule (II) comprising a promoter operably linked to a

CC nucleic acid segment encoding (I). (I) can have antipsoriatic,

CC dermatological, cytostatic, antiseborrheic, antidiabetic, antiskinning,

CC ophthalmological, vulnary, keratolytic and virucide activities, and

CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used

CC in gene therapy. (I) and (II) are useful for treating proliferative skin

CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,

CC squamous or basal cell carcinoma and viral or seborrheic wart. They can

CC also be used for treating proliferative eye diseases such as diabetic

CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of

CC prematurity and retinal detachment, and for treating and preventing

CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn

CC scar. AAH57577 to AAH62099 represent sequences used in the

CC exemplification of the present invention

XX SQ Sequence 19 BP; 1 A; 7 C; 7 G; 4 T; 0 U; 0 Other;

Query Match 0.4%; Score 12.2; DB 1; Length 19;

Best Local Similarity 82.4%; Pred. No. 5.9e+03;

Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 500 GCGGGGCTGCCTCGCA 516

DB 2 GCGTGGCTCTCCTCGCA 18

RESULT 5459

AAAL62285

ID AAL62285 standard; DNA; 20 BP.

XX AC AAL62285;

XX 06-OCT-2003 (first entry)

XX Human transcription factor-2 gamma antisense oligo, ISIS 128139.

XX Transcription factor-2 gamma; TFAP2C; AP-2 gamma; AP2-gamma; AP-2.2;

KW Stra2; activating enhancer-binding protein 2 gamma; antisense therapy;

KW oestrogen receptor factor-1; ERF-1; hyperproliferative disorder; cancer;

KW breast; colon; developmental disorder; human; phosphorothioate backbone;

KW antisense; ss.

XX Homo sapiens.

OS Synthetic.

XX Key Location/Qualifiers

FH modified\_base 1..20

FT /\*tag= a

FT /mod\_base= OTHER

FT /note= "Phosphorothioate backbone; All cytidines are 5-

FT methylcytidines"

FT modified\_base 1..5

FT /\*tag= b

FT /mod\_base= OTHER

FT /note= "2'methoxyethyl nucleotides"

FT modified\_base 16..20

FT /\*tag= c

FT /mod\_base= OTHER

FT /note= "2'methoxyethyl nucleotides"

XX WO2003051308-A2.

XX 26-JUN-2003.

PD 12-DEC-2002; 2002WO-US040100.

XX PF

XX 17-DEC-2001; 2001US-00023782.

XX (ISIS-) ISIS PHARM INC.

PA Cowsert LM, Freier SM;

XX WPI; 2003-569107/53.

XX New antisense compound targeted to a nucleic acid molecule encoding

PT transcription factor-2 gamma, useful for inhibiting expression of the

PT nucleic acid, and for treating cancer e.g. breast cancer or colon cancer.

XX Claim 3; Page 79; 107pp; English.

XX The invention relates to antisense compounds, compositions and methods

CC for modulating the expression of transcription factor-2 gamma (TFAP2C).

CC TFAP2C is also known as AP-2 gamma, AP2-gamma, AP-2.2, Stra2, activating

CC enhancer-binding protein 2 gamma, oestrogen receptor factor-1 and ERF-1.

CC The invention is useful for inhibiting the expression of TFAP2C in cells

CC or tissues. It is useful for treating an animal having a disease or

CC condition associated with TFAP2C, e.g., a hyperproliferative disorder

CC such as cancer e.g. breast cancer or colon cancer and a developmental

CC disorder. The invention is also useful for diagnostics, therapeutics,

CC prophylaxis and as research reagents and kits. It is also used in

CC antisense therapy. The present sequence is an antisense oligonucleotide

CC targetted to human TFAP2C DNA. This sequence is used to illustrate the

CC method of the invention

XX SQ Sequence 20 BP; 1 A; 8 C; 8 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 12.2; DB 1; Length 20;

Best Local Similarity 82.4%; Pred. No. 6.1e+03;

Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 59 GCGCGCGGCGACGCGCT 75

DB 1 GCGCGCGGCGGTACGCTT 17

RESULT 5460

AAAT91100/C

ID AAT91100 standard; DNA; 20 BP.

XX AC AAT91100;

XX 27-MAR-1998 (first entry)

DE Bovine lysosomal alpha-mannosidase (LAMAN) gene PCR primer mpSUT1F.

XX LAMAN; lysosomal alpha-mannosidase; alpha-mannosidosis; cattle;

KW diagnosis; screening; genetic test; PCR; primer; RFLP;

KW restriction fragment length polymorphism; ss.

XX Synthetic.

OS Bos taurus.

XX WO9726369-A1.

PD 24-JUL-1997.

XX 15-JAN-1997; 97WO-GB000109.

PF 15-JAN-1996; 96NO-00000163.

XX (HEAL/) HEALY P.

PA (DZIE/) DZIEGLEWSKA H.

XX Berg T, Tollersrud OK, Nilssen O;

PI WPI; 1997-385352/35.

XX Diagnosis and screening for bovine alpha-mannosidosis - by detecting

PT

KW Uncoupling protein-2; UCP2 gene; human; respiration; thermogenesis;  
KW obesity; hyperinsulinaemia; glucose intolerance; diabetes; syndrome X;  
KW hypothermia; wasting; cachexia; anorexia; inflammation; fever;  
KW hyperthermia; gene therapy; diagnosis; PCR; primer; ss.  
XX  
OS Synthetic.  
OS Homo sapiens.  
XX  
XX  
PN WO9831396-A1.  
XX  
XX  
PD 23-JUL-1998.  
XX  
XX  
PF 22-APR-1997; 97WO-US006864.  
XX  
XX  
PR 15-JAN-1997; 97US-0034960P.  
XX  
PA (UYDU-) UNIV DUKE.  
PA (REGC ) UNIV CALIFORNIA.  
PA (CNRS ) CENT NAT RECH SCI.  
XX  
PI Surwit RS, Collins SA, Warden CH, Seldin MF, Ricquier D;  
PI Bouillaud F;  
PI  
XX  
XX  
DR WPI; 1998-413823/35.  
XX  
XX  
PT Method for treating disease associated with altered UCP-2 expression - by  
PT administering agent which enhances or inhibits UCP-2 activity,  
PT effectively to treat obesity, diabetes, fever, hyperthermia, cachexia  
PT etc.  
XX  
XX  
PS Disclosure; Fig 1F; 98pp; English.  
XX  
XX  
CC Primer hUCP2.CDSR1 is used with forward primer hUCP2.CDSF1 (see AAV44619)  
CC in the PCR amplification of a 1098 bp region of the human uncoupling  
CC protein-2 (UCP2) gene coding sequence (see also AAV44595). The invention  
CC relates to a method for treating diseases associated with altered UCP2  
CC expression, such as obesity, diabetes, syndrome X, hypothermia,  
CC hyperinsulinaemia, glucose intolerance, wasting, anorexia, inflammation,  
CC cachexia, fever or hyperthermia  
XX  
SQ Sequence 19 BP; 7 A; 0 C; 12 G; 0 T; 0 U; 0 Other;  
Query Match 0.4%; Score 12.2; DB 1; Length 19;  
Best Local Similarity 82.4%; Pred. No. 5.9e+03;  
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 1787 CCATTCTTTCTCTCTCT 1803  
Db |||||  
19 CCCTCCTTCCCTCTCT 3  
RESULT 5457  
AA84722  
ID AA84722 standard; DNA; 19 BP.  
XX  
AC AA84722;  
XX  
XX  
DT 04-DEC-2000 (first entry)  
XX  
DE Cyclin E ribozyme binding site #255.  
XX  
KW Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.  
XX  
XX Mammalia.  
OS  
XX  
PN WO200032765-A2.  
XX  
XX  
PD 08-JUN-2000.  
XX  
XX  
PF 06-DEC-1999; 99WO-US028772.  
XX  
XX  
PR 04-DEC-1998; 98US-0110954P.  
XX

PA (IMMU-) IMMUSOL INC.  
XX  
PI Tritz R, Welch PJ, Barber JR, Robbins JM;  
XX  
DR WPI; 2000-412314/35.  
XX  
XX  
PT New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves  
PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,  
PT PCNA and Cyclin B1.  
XX  
PS Disclosure; Page 81; 109pp; English.  
XX  
XX  
CC The present invention relates to a hairpin or hammerhead ribozyme,  
CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase  
CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.  
CC Representative examples of ribozyme recognition sites are given in  
CC AAA82415 to AAA86787. The ribozyme of the invention is useful for  
CC inhibiting restenosis by introduction of the ribozyme into cells. The  
CC ribozyme is resistant to endonuclease activity and hence is efficient in  
CC restenosis treatment  
XX  
SQ Sequence 19 BP; 1 A; 7 C; 7 G; 4 T; 0 U; 0 Other;  
Query Match 0.4%; Score 12.2; DB 1; Length 19;  
Best Local Similarity 82.4%; Pred. No. 5.9e+03;  
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 500 GCGGGGCTGCCCTCGCA 516  
Db |||||  
2 GCGTGGCTCTCCTCGCA 18  
RESULT 5458  
AAH59884  
ID AAH59884 standard; DNA; 19 BP.  
XX  
AC AAH59884;  
XX  
DT 10-SEP-2001 (first entry)  
XX  
DE Cyclin E ribozyme binding site SEQ ID NO:2308.  
XX  
KW Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;  
KW recognition site; target; ribozyme binding site; eye disease; vulneryary;  
KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;  
KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;  
KW matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;  
KW antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;  
KW antisickling; ophthalmological; keratolytic; gene therapy; viral wart;  
KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;  
KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;  
KW sickle cell retinopathy; ss.  
XX  
OS Homo sapiens.  
OS Synthetic.  
XX  
PN WO200130362-A2.  
XX  
PD 03-MAY-2001.  
XX  
PF 26-OCT-2000; 2000WO-US029500.  
XX  
XX  
PR 26-OCT-1999; 99US-0161532P.  
XX  
PA (IMMU-) IMMUSOL INC.  
XX  
PI Robbins JM, Tritz R;  
XX  
XX WPI; 2001-300427/31.  
DR  
XX  
PT Treating proliferative skin or eye diseases and scarring, using ribozymes  
PT that cleave RNA encoding cytokines involved in inflammation, matrix  
PT metalloproteinases, growth factors and cell-cycle dependent kinases.

Query Match 0.4%; Score 12.2; DB 1; Length 18;  
Best Local Similarity 82.4%; Pred. No. 5.6e+03;  
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1979 AAAAAAGAAAAGTGTG 1995  
| | | | | | | | | | | | | | | |  
Db 18 AAAAAAGAAAAGGGGG 2

RESULT 5454  
ABL95913/C  
ID ABL95913 standard; DNA; 18 BP.  
XX  
AC ABL95913;  
XX  
DT 19-JUN-2002 (first entry)  
XX  
DE Probe poly w for assaying nucleic acids.  
XX  
KW Probe; polymorphism detection; mutation detection; disease diagnosis;  
KW microbial identification; ss.  
XX  
OS Unidentified.  
XX  
PN WO200208414-A1.  
XX  
PD 31-JAN-2002.  
XX  
PF 27-JUN-2001; 2001WO-IB001147.  
XX  
PR 27-JUN-2000; 2000JP-00193133.  
PR 03-AUG-2000; 2000JP-00236115.  
PR 26-SEP-2000; 2000JP-00292483.  
XX  
PA (NAAD-) NAT INST ADVANCED IND SCI & TECHNOLOGY.  
PA (KANK-) KANKYO ENG CO LTD.  
XX  
PI Kurane R, Kanagawa T, Kamagata Y, Torimura M, Kurata S, Yamada K;  
PI Yokomaku T;  
XX  
DR WPI; 2002-195876/25.  
XX  
PT Fluorescently-labeled nucleic acid probes for assaying nucleic acids and  
PT their polymorphism and mutation, particularly useful in science and  
PT medicine for e.g. analytical applications, disease diagnosis and  
PT microbial identification.  
XX  
PS Example 14; Page 64; 152pp; Japanese.  
XX  
CC The present invention relates to nucleic acid probes, which are useful  
CC for assaying nucleic acids by hybridising with a target nucleic acid, in  
CC which a single-stranded oligonucleotide is labelled with a fluorescent  
CC substance and a quencher in a manner that the fluorescence intensity of  
CC the hybridisation reaction system is increased after completion of the  
CC hybridisation but no stem loop structure is formed. The probes are useful  
CC for assaying nucleic acids and their polymorphism and mutation,  
CC particularly useful for e.g. analytical applications, disease diagnosis  
CC and microbial identification. The present sequence was used to illustrate  
CC the invention  
XX  
SQ Sequence 18 BP; 0 A; 6 C; 0 G; 12 T; 0 U; 0 Other;

Query Match 0.4%; Score 12.2; DB 1; Length 18;  
Best Local Similarity 82.4%; Pred. No. 5.6e+03;  
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1979 AAAAAAGAAAAGTGTG 1995  
| | | | | | | | | | | | | | | |  
Db 18 AAAAAAGAAAAGGGGG 2

RESULT 5455  
ABL44451/C

ID ABL44451 standard; DNA; 18 BP.  
XX  
AC ABL44451;  
XX  
DT 11-APR-2002 (first entry)  
XX  
DE Human chromosome lp36-35 PCR primer SEQ ID NO:1495.  
XX  
KW Human; chromosome lp36-35; chromosome 21q22.1; genetic analysis; genome;  
KW PCR primer; ss.  
XX  
OS Homo sapiens.  
XX  
PN JP2001321190-A.  
XX  
PD 20-NOV-2001.  
XX  
PF 12-MAR-2001; 2001JP-00068285.  
XX  
PR 10-MAR-2000; 2000JP-00066716.  
XX  
PA (RIKA ) RIKAGAKU KENKYUSHO.  
PA (GENO-) GENOTEX YG.  
XX  
DR WPI; 2002-144136/19.  
XX  
PT Arraying genome clones.  
XX  
PS Claim 4; Page 34; 528pp; Japanese.  
XX  
CC The present invention describes a method of arraying genome clones. The  
CC method comprises: (a) clones of the genomic libraries contained in  
CC multiwell plates numbered for discrimination are mixed in each of the  
CC multiwell plates; (b) a primer designed based on the chromosome marker  
CC sequence is added to the mixture to carry out an amplification reaction;  
CC (c) a signal corresponding to the marker is detected from the resultant  
CC amplified product to specify the discrimination Nos. of the multiwell  
CC plates containing the clones having said marker sequence; (d) the order  
CC of the markers is changed so that the same discrimination Nos. succeed to  
CC the maximum in the specified discrimination Nos. to array the multiwell  
CC plates; (e) the clones in the multiwell plates of the specified  
CC discrimination Nos. are mixed respectively in each wells of longitudinal  
CC and lateral directions; (f) the mixed clones are cultured and the  
CC resultant cultures are amplified by using the above primer; (g) signals  
CC are detected from the amplified products; (h) the clones in the multiwell  
CC plates are specified from the detected result; and (i) the clones are  
CC reconstituted as the positions on the chromosome and arrayed. The  
CC microarray is useful for gene analysis. ABL42957 to ABL45322 represent  
CC PCR primers for human chromosome lp36-35 DNA, and ABL45323 to ABL45634  
CC represent PCR primers for human chromosome 21q22.1, which are  
CC specifically claimed for use in the present invention  
XX  
SQ Sequence 18 BP; 1 A; 8 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 0.4%; Score 12.2; DB 1; Length 18;  
Best Local Similarity 82.4%; Pred. No. 5.6e+03;  
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1546 GTAGGGGAGGAGCAGGA 1562  
| | | | | | | | | | | | | | | |  
Db 17 GTAGGGGAGGAGCAGGA 1

RESULT 5456  
AAV44620/C  
ID AAV44620 standard; DNA; 19 BP.  
XX  
AC AAV44620;  
XX  
DT 24-NOV-1998 (first entry)  
XX  
DE Human uncoupling protein-2 UCP2 gene primer hUCP2.CDSR1.  
XX

PT Novel short interfering RNA and enzymatic nucleic acid useful for  
PT treating cancer, modulates the expression of a nucleic acid encoding  
XX HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.  
PS Claim 58; Page 124; 185pp; English.  
XX  
CC The invention relates to a novel short interfering RNA (siRNA) nucleic  
CC acid molecule or an enzymatic nucleic acid molecule, that modulates  
CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,  
CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic  
CC acid molecule of the invention has cytostatic, anti-HIV, and anti-  
CC rheumatic activity. The nucleic acid molecules are useful for reducing  
CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are  
CC also useful for treating breast, ovarian, colorectal, lung, prostate,  
CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences  
CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,  
CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human  
CC ribozymes of the invention  
XX  
SQ Sequence 17 BP; 1 A; 10 C; 2 G; 0 T; 4 U; 0 Other;

Query Match 0.4%; Score 12.2; DB 1; Length 17;  
Best Local Similarity 82.4%; Pred. No. 5.3e+03;  
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 1544 GAGTAGGGAAGGACAG 1560  
Db 17 GAGTGGGGCAGGACAG 1

RESULT 5452  
ABL57566/C  
ID ABL57566 standard; DNA; 18 BP.  
XX  
AC ABL57566;  
XX  
DT 26-JUL-2002 (first entry)  
XX  
DE Synthetic deoxyribonucleotide poly w.  
XX  
KW Concentration; quantification; mutation detection; polymorphic;  
KW polymerase chain reaction; PCR; ss.  
XX  
OS Synthetic.  
XX  
PN EP1046717-A2.  
XX  
PD 25-OCT-2000.  
XX  
PF 20-APR-2000; 2000EP-00108643.  
XX  
PR 20-APR-1999; 99JP-00111601.  
XX  
PA (NIBI-) JAPAN BIOINDUSTRY ASSOC.  
PA (AGEN) AGENCY OF IND SCI & TECHNOLOGY.  
PA (KANK-) KANKYO ENG CO LTD.  
XX  
PI Kurane R, Kanagawa T, Kamagata Y, Kurata S, Yamada K, Yokomaku T;  
PI Koyama O, Furusho K;  
XX  
DR WPI; 2000-657765/64.  
XX  
PT Determining the concentration of a target nucleic acid, useful e.g. for  
PT detecting genetic mutations, comprises using a fluorescently labeled  
PT probe in which emission is reduced by binding to the target nucleic acid.  
XX  
PS Example 7; Page 24; 55pp; English.  
XX  
CC The invention relates to the determination of the concentration of a  
CC nucleic acid target, using a fluorescently labeled probe which produces  
CC reduced fluorescence emission when hybridised to the target nucleic acid.  
CC The method comprises measuring the reduction in emission caused by  
CC hybridisation. The new method is particularly used to quantify target

CC nucleic acids by a real-time polymerase chain reaction, e.g. for  
CC quantifying microbial cells in co-cultures or symbiotic systems, for  
CC detecting gene mutations or polymorphisms, and for analysing melting  
CC curves of target nucleic acids to determine a Tm value. Methods of the  
CC invention allow target nucleic acids to be quantified quickly, easily and  
CC accurately. Particularly there is no need to remove unbound probe, and no  
CC materials are introduced that inhibit amplification by Taq polymerase (so  
CC conventional PCR conditions can be used). The specificity of PCR is kept  
CC high (amplification of primer dimers is delayed), and the limit of  
CC quantitation is reduced. Complex probes are not needed, and amplification  
CC can be monitored in real time. The working graph for data analysis  
CC (automatically generated by a computer) has a higher correlation  
CC coefficient than conventional graphs so more accurate quantitation is  
CC possible. The current sequence represents a synthetic  
CC deoxyribonucleotide that was used for investigating the effects of  
CC the kind of bases in each target nucleic acid, and the kind of bases in  
CC its corresponding invention nucleic acid probe  
XX  
SQ Sequence 18 BP; 0 A; 6 C; 0 G; 12 T; 0 U; 0 Other;

Query Match 0.4%; Score 12.2; DB 1; Length 18;  
Best Local Similarity 82.4%; Pred. No. 5.6e+03;  
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 1979 AAAAAAGAAAAAGTGTG 1995  
Db 18 AAAAAAGAAAAAGGGGG 2

RESULT 5453  
ABA97651/C  
ID ABA97651 standard; DNA; 18 BP.  
XX  
AC ABA97651;  
XX  
DT 11-APR-2002 (first entry)  
XX  
DE Poly w nucleotide sequence.  
XX  
KW ss; fluorochrome; nucleic acid probe; fluorescence.  
KW Unidentified.  
XX  
PN JP2001286300-A.  
XX  
PD 16-OCT-2001.  
XX  
PF 20-APR-2000; 2000JP-00120097.  
XX  
PR 20-APR-1999; 99JP-00111601.  
PR 24-AUG-1999; 99JP-00236666.  
PR 30-AUG-1999; 99JP-00242693.  
PR 01-FEB-2000; 2000JP-00028896.  
XX  
PA (BIOI-) BIOINDUSTRY KYOKAI SH.  
PA (KANK-) KANKYO ENG KK.  
PA (KEIZ-) KEIZAI SANGYOSHO SANGYO GIJUTSU SOGO KEN.  
XX  
DR WPI; 2002-134193/18.  
XX  
PT Measurement of nucleic acids, using a nucleic acid probe and analysis of  
PT the obtained data.  
XX  
PS Example 7; Page 19; 34pp; Japanese.  
XX  
CC This invention relates to a method for measuring nucleic acids using a  
CC nucleic acid probe labelled with a fluorochrome. The nucleic acid probe  
CC decreases the fluorescence of the fluorochrome when hybridised with a  
CC target nucleic acid, the decrease in the fluorescence is measured. The  
CC method can be used for measuring a target nucleic acid  
XX  
SQ Sequence 18 BP; 0 A; 6 C; 0 G; 12 T; 0 U; 0 Other;



CC treat central nervous system (CNS) injury and cerebrovascular accident  
CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),  
CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),  
CC parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob  
CC disease, muscular dystrophy, and/or other neurodegenerative disease  
CC states which respond to the modulation of NOGO expression. The present  
CC sequence is a hammerhead ribozyme of the invention  
XX  
SQ Sequence 17 BP; 14 A; 0 C; 2 G; 0 T; 1 U; 0 Other;  
  
Query Match 0.4%; Score 12.2; DB 1; Length 17;  
Best Local Similarity 82.4%; Pred. No. 5.3e+03;  
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
  
QY 2786 AAAAAAAAAAAAAAAAAA 2802  
Db 1 AAAAAAAAAAGAGAGAAA 17  
  
RESULT 5450  
ABK02172  
ID ABK02172 standard; RNA; 17 BP.  
XX  
AC ABK02172;  
XX  
DT 12-MAR-2002 (first entry)  
XX  
DE Human NOGO DNazyme #84.  
XX  
KW Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;  
KW cerebroprotective; nootropic; neuroprotective; antiparkinsonian;  
KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;  
KW DNazyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia;  
KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;  
KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;  
KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;  
KW inflammatory arthropathy; central nervous system injury;  
KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;  
KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;  
KW parkinson's disease; ataxia; Huntington's disease;  
KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.  
XX  
OS Homo sapiens.  
OS Synthetic.  
XX  
PN WO200159103-A2.  
XX  
PD 16-AUG-2001.  
XX  
PF 09-FEB-2001; 2001WO-US004273.  
XX  
PR 11-FEB-2000; 2000US-0181797P.  
PR 28-FEB-2000; 2000US-0185516P.  
PR 06-MAR-2000; 2000US-0187128P.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
PA (BLAT/) BLATT L.  
PA (MCSW/) MCSWIGGEN J.  
PA (CHOW/) CHOWRIRA B M.  
XX  
PI Blatt L, Mcswiggen J, Chowrira BM;  
XX  
XX WPI; 2001-607195/69.  
XX  
DR Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense  
XX constructs, which down regulate expression of a CD20 gene or neurite  
PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and  
PT central nervous system injury.  
PT  
XX  
PS Claim 88; Page 114; 200pp; English.  
XX  
CC The invention relates to a nucleic acid molecule which down regulates  
CC expression of a CD20 gene and a nucleic acid molecule which down

regulates expression of a neurite growth inhibitor gene (NOGO). The  
nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a  
DNazyme) an Inozyme (an endolytic nucleic acid cleaving an RNA molecule  
possessing an NCH motif), a G-cleaver (cleaving RNA with a NVN motif) pr  
an amberzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA  
with a VGY motif). The CD20-targeting nucleic acid is used to cleave RNA  
of CD20 in the presence of a divalent cation that is preferably Mg<sup>2+</sup>.  
Furthermore, it may be contacted with a cell to reduce CD20 activity of  
the cell and treat a patient having a condition associated with the level  
of CD20. The treatment may further comprise the use of one or more  
therapies. In particular, the CD20 targeting nucleic acid may be used to  
treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-  
Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic  
leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell  
lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,  
immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-  
targeting nucleic acid is used to cleave RNA of the NOGO gene in the  
presence of a divalent cation that is preferably Mg<sup>2+</sup>. Furthermore, the  
nucleic acid may be contacted with a cell to reduce NOGO activity of the  
cell and treat a patient having a condition associated with the level of  
NOGO. The treatment may further comprise the use of one or more  
therapies. In particular, the NOGO-targeting nucleic acid may be used to  
treat central nervous system (CNS) injury and cerebrovascular accident  
(CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),  
chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),  
parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob  
disease, muscular dystrophy, and/or other neurodegenerative disease  
states which respond to the modulation of NOGO expression. The present  
sequence is a DNazyme molecule of the invention

Sequence 17 BP; 14 A; 0 C; 2 G; 0 T; 1 U; 0 Other;  
  
Query Match 0.4%; Score 12.2; DB 1; Length 17;  
Best Local Similarity 82.4%; Pred. No. 5.3e+03;  
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
  
QY 2786 AAAAAAAAAAAAAAAAAA 2802  
Db 1 AAAAAAAAAAGAGAGAAA 17  
  
RESULT 5451  
ABZ61926/C  
ID ABZ61926 standard; RNA; 17 BP.  
XX  
AC ABZ61926;  
XX  
DT 21-MAR-2003 (first entry)  
XX  
DE Human H-Ras DNazyme target #717.  
XX  
KW Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;  
KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;  
KW anti-rheumatic; cancer; AIDS; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO200297114-A2.  
XX  
PD 05-DEC-2002.  
XX  
PF 29-MAY-2002; 2002WO-US016840.  
XX  
PR 29-MAY-2001; 2001US-0294140P.  
PR 06-JUN-2001; 2001US-0296249P.  
PR 10-SEP-2001; 2001US-0318471P.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
XX  
PI Mcswiggen J;  
XX  
DR WPI; 2003-140484/13.  
XX

DE Integrin subunit beta 3 substrate sequence SEQ ID NO:5819.

XX Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;

KW integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;

KW hammerhead ribozyme; angiogenic factor; cytosolic; antidiabetic;

KW ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;

KW dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis;

KW age related macular degeneration; inflammation; neovascular glaucoma;

KW myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;

KW tuberos scleriosis; pot-wine stain; Sturge Weber syndrome;

KW Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.

XX Homo sapiens.

OS WO9950403-A2.

XX 07-OCT-1999.

PD 24-MAR-1999; 99WO-US006507.

XX 27-MAR-1998; 98US-0079678P.

XX (RIBO-) RIBOZYME PHARM INC.

PA Pavco PA, Roberts E, Jarvis T, Coeshott C, Mcswiggen JA;

PI WPI; 1999-591315/50.

DR Novel ribozymes for modulating the synthesis, expression and/or stability

XX of an mRNA encoding an angiogenic factors.

PT Claim 54; Page 230; 305pp; English.

XX The present invention describes enzymatic nucleic acid molecules with RNA

CC cleaving activity, which specifically cleave RNA encoded by an aryl

CC hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3

CC gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to

CC AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT,

CC and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their

CC corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to

CC AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086

CC and AAA19155 to AAA19222 represent their corresponding target sequences;

CC AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme

CC sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and

CC AAA21596 to AAA21688 represent their corresponding target sequences;

CC AAA21689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequence

CC for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to

CC AAA23422 represent their corresponding target sequences. The ribozymes of

CC the invention are used for modulating the synthesis, expression and/or

CC stability of an mRNA encoding angiogenic factor, especially ARNT,

CC integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are

CC especially used to treat cancer, diabetic retinopathy, age related

CC macular degeneration (ARMD), inflammation, and arthritis, as well as

CC neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,

CC angiofibroma of tuberos scleriosis, pot-wine stains, Sturge Weber

CC syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,

CC and other syndromes and diseases related to the levels of ARNT, Tie-2,

CC integrin subunit alpha-6, or integrin subunit beta-3

XX Sequence 17 BP; 0 A; 3 C; 0 G; 0 T; 14 U; 0 Other;

SQ Query Match 0.4%; Score 12.2; DB 1; Length 17;

Best Local Similarity 82.4%; Pred. No. 5.3e+03;

Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2786 AAAAAAAAAAAAAA 2802

Db 17 AAAAAAGGAAGAAAA 1

RESULT 5449

ABK00237

ID ABK00237 standard; RNA; 17 BP.

XX ABK00237;

AC 12-MAR-2002 (first entry)

DT Human NOGO Hammerhead Ribozyme #237.

XX Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;

KW cerebroprotective; neurotropic; neuroprotective; antiparkinsonian;

KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;

KW DNazyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia;

KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;

KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;

KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;

KW inflammatory arthropathy; central nervous system injury;

KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;

KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;

KW Parkinson's disease; ataxia; Huntington's disease;

KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.

XX Homo sapiens.

OS Synthetic.

XX WO200159103-A2.

PD 16-AUG-2001.

XX 09-FEB-2001; 2001WO-US004273.

PF 11-FEB-2000; 2000US-0181797P.

XX 28-FEB-2000; 2000US-0185516P.

PR 06-MAR-2000; 2000US-0187128P.

XX (RIBO-) RIBOZYME PHARM INC.

PA (BLAT/) BLATT L.

PA (MCSW/) MCSWIGGEN J.

PA (CHOW/) CHOWRIRA B M.

XX Blatt L, Mcswiggen J, Chowrira BM;

PI WPI; 2001-607195/69.

XX Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense

PT constructs, which down regulate expression of a CD20 gene or neurite

PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and

XX central nervous system injury.

PS Claim 88; Page 69; 200pp; English.

XX The invention relates to a nucleic acid molecule which down regulates

CC expression of a CD20 gene and a nucleic acid molecule which down

CC regulates expression of a neurite growth inhibitor gene (NOGO). The

CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a

CC DNazyme) an Inozyme (an endolytic nucleic acid cleaving an RNA molecule

CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) or

CC an amberzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA

CC with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA

CC of CD20 in the presence of a divalent cation that is preferably Mg<sup>2+</sup>.

CC Furthermore, it may be contacted with a cell to reduce CD20 activity of

CC the cell and treat a patient having a condition associated with the level

CC of CD20. The treatment may further comprise the use of one or more

CC therapies. In particular, the CD20 targeting nucleic acid may be used to

CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-

CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic

CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell

CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,

CC immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-

CC targeting nucleic acid is used to cleave RNA of the NOGO gene in the

CC presence of a divalent cation that is preferably Mg<sup>2+</sup>. Furthermore, the

CC nucleic acid may be contacted with a cell to reduce NOGO activity of the

CC cell and treat a patient having a condition associated with the level of

CC NOGO. The treatment may further comprise the use of one or more

CC therapies. In particular, the NOGO-targetting nucleic acid may be used to

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Db      17 ACAGAAATTAAAAAAA 1

RESULT 5447
AAX69806
ID AAX69806 standard; RNA; 17 BP.
XX
AC AAX69806;
XX
DT 28-JUL-1999 (first entry)
XX
DE Human flt1 VEGF receptor hammerhead ribozyme substrate #1101.
XX
KW Vascular endothelial growth factor receptor; VEGF receptor; flk-1; flk-1;
KW KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
KW tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
KW fms-like tyrosine kinase 1; kinase insert domain containing receptor;
KW foetal liver kinase 1; ss.
XX
OS Homo sapiens.
XX
PN WO9715662-A2.
XX
PD 01-MAY-1997.
XX
PF 25-OCT-1996; 96WO-US017480.
XX
PR 26-OCT-1995; 95US-0005974P.
XX
PT 11-JAN-1996; 96US-00584040.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (CHIR ) CHIRON CORP.
XX
PI Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;
XX WPI; 1997-259017/23.
XX DR
XX Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
XX stability - useful for treating e.g. tumour angiogenesis, psoriasis,
XX rheumatoid arthritis, etc., in a human patient.
XX
PS Claim 4; Page 80; 218pp; English.
XX
CC The present invention describes nucleic acid molecules which modulate the
CC synthesis, expression and/or stability of a mRNA encoding 1 or more
CC receptors of vascular endothelial growth factor (VEGF). A patient
CC (preferably human) having a condition associated with the level of the
CC fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
CC receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
CC angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
CC treated by administering the nucleic acid molecule or the expression
CC vector to the patient. AAX67275 to AAX75752 represent specific examples
CC of nucleic acid molecules from the present invention
XX
SQ Sequence 17 BP; 3 A; 2 C; 0 G; 0 T; 12 U; 0 Other;

Query Match          0.4%; Score 12.2; DB 1; Length 17;
Best Local Similarity 11.8%; Pred. No. 5.3e+03;
Matches 2; Conservative 12; Mismatches 3; Indels 0; Gaps 0;

QY      2174 TTTTTTTTTTTTAACT 2190
DB      1 UUUUUUUUUUUCCAAU 17

RESULT 5448
AAX22593/C
ID AAA22593 standard; RNA; 17 BP.
XX
AC AAA22593;
XX
XX 19-JUN-2000 (first entry)
XX

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